VOL 82

NO. 5

# textile

MAY . 1956

# bulletin

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#### JACOBS CASTEEL DOBBY CORDS

Give You These Great Improvements

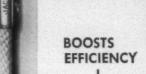


**Open End** Cast right to wire core. Will not pull out. Eliminates "S" hooks. Also available with closed eye.

**Nylon Braid** Gives dobby cord a wearing surface that outlasts cotton by far. Available in No. 8 (8/32") and No. 7 (7/32") diameters.

Turnbuckle That Really Locks. Simplifies harness frame adjustment.

Jacobs Casteel and Wire-Reinforced Dobby Cords are also available with cotton-braided wearing surface, in No. 8 and No. 7 diameters.



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Been figuring on sending some counters in for a tune-up? Well, now's the time to do it. Veeder-Root's Southern Headquarters... with its completely equipped set-up for service and its full staff of top technicians... is all set to take care of all your needs, big or little, right now.

Service is just as fast as you ask for it. And the quality of the work is what you always expect . . . and get . . . from Veeder-Root. So just pack up your counters and

send them to Veeder-Root Inc., Greenville, S. C. The address is Box 297. Or if you're coming over the road, we're just six miles from Greenville on the Spartanburg Highway.

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INCORPORATED



Chicago 6, III. • New York 19, N. Y. • Montreal 2, Canada Offices and Agents in Principal Cities

... and here's why it's wise to make sure all your New Machines are equipped with NEW VEEDER-ROOT COUNTERS . . .

Modern Veeder-Root Counters . . . for looms, frames, knitting machines and all types of textile mill equipment . . . are built with unmatched Veeder-Root know-how and quality to give accurate facts-and-figures through years of trouble-free service. Count on Veeder-Root for closest Countrol of production and uniformity. Write Veeder-Root for all your counter needs.



2-3-4 Convertible Counters for looms, frames, knitting machines, etc.



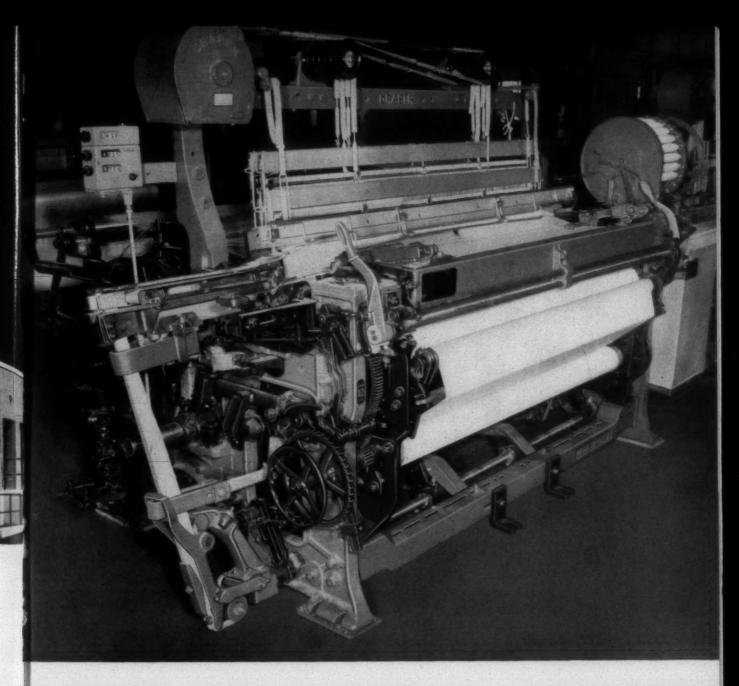
Loom Cut Meters for controlling uniform cuts of cloth.



Vary-Tally Multiple Unit Reset Counters for inventory, inspection, and 1,001 other hand-counting jobs.



Double-Wheel Linear Counter for indicating lengths in feet, yards, et



# A GREATER RANGE OF FABRICS CAN NOW BE WOVEN ON THE DRAPER X-2 MODEL LOOM

The adaptation of a new Draper High Roll Ratchet Take-Up for the X-2 model makes it possible to weave fine cottons or synthetics equally well on one loom.

Equipped with double take-up rolls, this take-up provides the increased frictional surface needed to hold the cloth when weaving spun or filament yarns.

A separate wind-up permits easier doffing. A pressure roll allows the cloth to be doffed without stopping the loom.

Linkage-Type Parallel Motions, Clock Spring Top, Center Fork Motion and many other refinements combine to make the Draper X-2 the most versatile loom in the world today.



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mills report

### yarn uniformity improves

#### with DAYCO Rub Aprons

Surest way to improve uniformity *overnight* is to equip every card you have with revolutionary, new, improved Dayco Rub Aprons—today!

Greater uniformity has been reported by mills using Daycos, plus really substantial savings in time and money through reduced downtime and maintenance.

Tremendously improved uniformity results from Daycos' higher coefficient of friction and the ability of the two layer, reinforced, rubber-impregnated fabric to reduce eccentric motion up to 33%. In addition, the new, improved surface of the Dayco Aprons never becomes glazed, thus assuring proper density to the yarn.

You'll get better traction, better tracking and improved non-slip drive by virtue of the perfectly concentric construction that makes them hug the roll tightly at all times. Stronger ends grip buttons tenaciously for long, efficient, trouble-free service.

Unaffected by emulsion oils, easily-installed Dayco Aprons do not "grow".

Dayco Aprons generate less static and are not affected by temperature or humidity. For complete details on the new Dayco Rub Apron contact your Dayton representative or write Dayton Rubber Co., Textile Division, 401 National Bank Bldg., Greenville, S. C.

Dayco Endless Condenser Tape
Features offering additional savings . . . greater card efficiency:
No stretch—little need for take-ups
Less tendency to twist or turn over
Easy to clean—require less attention
Unaffected by oil of static
Will not crack, economical, efficient

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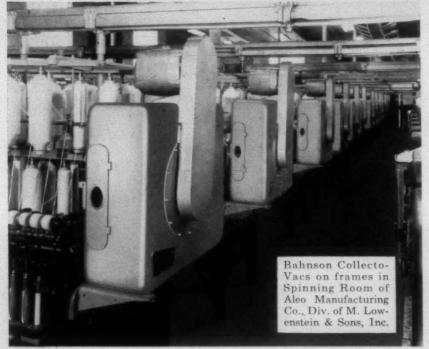


Dayco and Dayton Thorobred Textile products for Better Spinning and Weaving

# Non

# Bahnson Collecto-Vac

#### FOR COLLECTING LINT AND BROKEN ENDS



Top textile firms find greater performance advantages with the efficient Bahnson Collecto-Vac



Bahnson\_\_\_\_\_ Collecto-Vac Mill-proved Collecto-Vac features offer you more for your investment as standard equipment

IN MATERIALS: Attractive anodized aluminum flutes — no warpage or cracking. Rugged 14 gauge stamped steel collection box.

IN DESIGN: More uniform suction pressure. Scroll type fan discharge to disperse motor alley heat, not concentrate it.

Belt driven fan for flexibility, or internal motor for economy. (A scroll type fan is used with both designs.)

**IN PERFORMANCE:** Greater cleanliness and collection of flying lint. Positive end collection the length of the frame. Lower horsepower at same CFM and suction pressure.

#### FREE BULLETIN

Write us today for our free booklet containing detailed information on the new Bahnson Collecto-Vac.



AIR CONDITIONING / CLEANING VACUUM COLLECTION

M. LOWENSTEIN & SONS, INC. GRANITEVILLE MILLS WALTON COTTON MILLS NEW BRAUNFELS TEXTILE MILLS BIBB MANUFACTURING COMPANY SPRAY COTTON MILLS M. ODELL MANUFACTURING CO. KENDALL MILLS JOANNA COTTON MILLS COMPANY CLIFTON MANUFACTURING COMPANY DACOTAH COTTON MILLS, INC MT. VERNON-WOODBERRY MILLS BURLINGTON INDUSTRIES. INC. ERWIN MILLS. INC JOHNSTON MANUFACTURING CO DAN RIVER MILLS COWIKEE MILLS. INC COMPANIA COLOMBIANA DE TEJIDOS ABBOTT WORSTED MILLS

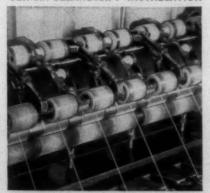
#### 91 of the top 100

Of the nation's 100 top textile manufacturing firms, 91 are users of Bahnson equipment!

## Your Investment Returned 100%



CLIMAX-CLEANDRAFT INSTALLATION



CLIMAX-CLEANDRAFT Top Rolls shown above are part of an installation in continuous operation for over two years at HOOSAC MILLS, New Bedford, Mass. Hundreds of similar installations give proof positive that CLIMAX-CLEANDRAFT Top Rolls represent an investment that pays you big dividends... returns high yields!

Complete Service
Facilities and Staff
Located Strategically
for Immediate Action,
as Follows:

#### 4½ MILLION TOP ROLLS ...and 14 YEARS of PERFORMANCE

... has provided irrefutable proof that the use of CLIMAX and CLEANDRAFT Non-Lubricating Top Rolls eliminates top roll oiling ... cuts maintenance costs ... reduces picking time in half (extends the picking cycle up to 8 times!) ... decreases yarn variation on a continuous basis. Their effective value lies in increased spinners work loads, cleaner frames, better quality and uniformity of yarn. RESULT? Economies thus effected give you a 100% return on your investment — IN 3½ YEARS!

\*Based on confidential tests under actual mill operation

for further information write or phone



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\* New Center Suspension Weighting Unit and New Top Rolls for Spinning Whitin's new UNITROL\*\* Center Suspension Weighting Unit and new top rolls for spinning provides maximum performance and yarn quality combined with new lows in cleaning, maintenance, lubrication and spinning costs. It is standard on Whitin spinning frames and available for change-overs. UNITROL has been thoroughly tested in large mill installations.

- True precision construction
- Pre-set internal spring weighting
- No levers, saddles or dead weights
- Picking reduced 95%
- Run out .001" or less
- Whitin anti-friction front rolls; non-lubricated middle and back rolls — all new in design
- Complete lint exclusion and grease retention
- Smoothly streamlined

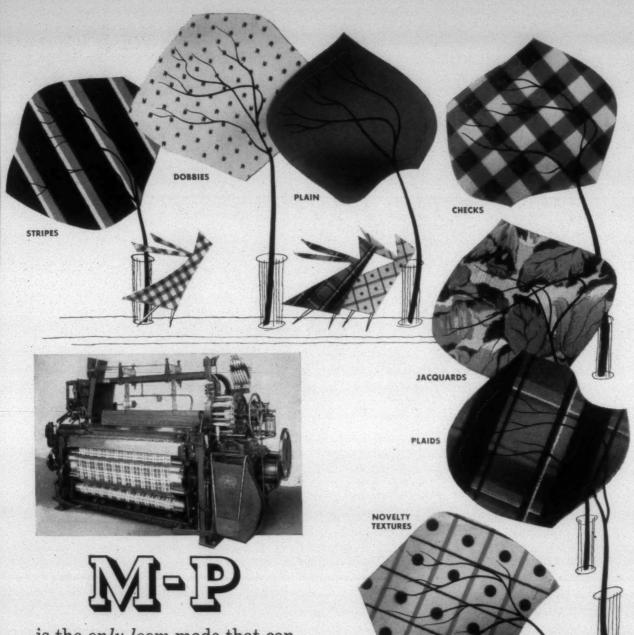
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CHARLOTTE, N. C. • ATLANTA, GA. • SPARTANBURG, N. C. • DEXTER, ME.

\* TRADE MARK

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is the *only loom* made that can handle *all* these constructions . . . *on a competitive basis* 

As the trees leaf out, fabric-fashions likewise blossom in bright new colors and subtle combinations . . . in a bewildering and ever-changing array.

These sudden fashion-changes can mean "sudden death" in many weaverooms . . . but not in those that have the Maximum Protection of M-P Looms. For these new C & K Looms are the only looms that can handle all constructions . . . plain or fancy . . . and can be converted from one to the other overnight.

That's why these all-new Multi-Purpose Looms give the Most Protection you can get for your weaveroom in today's highly changeable, highly competitive markets. See C & K today.



This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Fabrics . . which are WOVEN FABRICS.

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NUMBER 4 OF A SERIES:

# ACCURATE DRAFTING CONTROL ASSURES SMOOTH, UNIFORM YARN AND RESULTANT HIGH QUALITY. THESE FACTORS ARE DIRECTLY DEPENDENT ON THE ACCURACY OF THE ROLL ASSEMBLY AND SPECIFICALLY ON THE ROLLS THEMSELVES.

Pictured above are unretouched, magnified views of 2 bottom rolls. ON THE RIGHT IS "YOUR BEST MONEY VALUE" — THE SACO-LOWELL STEEL BOTTOM ROLL WITH ROLLED FLUTES. This exclusive roll fluting gives a far more uniform contour, plus a smoother surface that keeps flutes clean and free of microscopic rough spots that act as fibre traps. In addition, these Saco-Lowell Rolls are manufactured from the same dies used in making the original rolls, have the exact fluting arrangement and therefore run "true" in every respect. Saco-Lowell steel bottom rolls with "rolled flutes" are manufactured from special stock, produced by master craftsmen, induction hardened by an exclusive Saco-Lowell process, specially honed to give an extra satin-smooth finish, and ruthlessly inspected to assure perfection.

Poorly formed, irregular flutes, as shown in the illustration at the left, interfere with fibre flow and are the source of yarn irregularities often easily detected but hard to trace. Hardening, not properly controlled, creates variations in the depth of "case", thus causing uneven wear and loss of fibre grip. Failure to match exactly the original roll specifications makes it impossible to obtain uniform results throughout the spinning room.

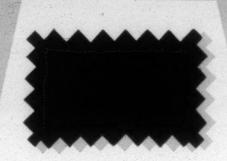
"There is hardly anything in the world that someone cannot make a little worse and sell a little cheaper — and the people who consider price alone are this man's lawful prey."

John Ruskin

There can be no question — "It Pays to Use Genuine Saco-Lowell Repair Parts." Our engineers will be glad to discuss steel rolls with you and make specific recommendations. Write to the nearest Saco-Lowell Sales Office.

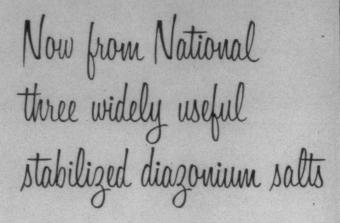
\*Patent Pending.
See Saco-Lowell Bulletin — July 1953

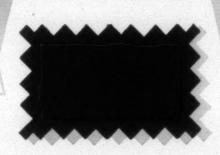




#### NATIONAL® BLUE 3BVS SALT

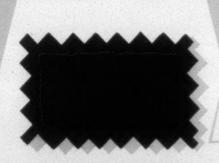
Produces reddish-blue shades when coupled with National Naphthols AS-OL, AS-BG, AS-RO, AS-BO and AS-BR; greenish-blue with other naphthols except AS-G which yields a dull orange shade. Full properties and application data are given in our Bulletin 431, available from our nearest office.





#### NATIONAL BLACK K SALT

Couples with National Naphthols
AS-BG, AS-BS and AS-SW to produce
a jet black. Yields reddish-black when
coupled with other naphthols. Ask our nearest
branch office for our shade card (Bulletin #430)
giving complete data on properties and procedures
for package dyeing, naphtholating and printing.



#### NATIONAL BLUE 2BS SALT

This salt produces greenish-blue shades when coupled with National Naphthols AS-D, AS-TR Disp. and AS-E; reddish-blue shades with other naphthols except AS-G Disp. which yields a bright yellow. For properties, naphtholating and developing procedures, get our shade card (Bulletin #440) from our branch office nearest you.

Coupled with various National Naphthols these National stabilized diazonium salts all possess very good-to-excellent fastness to light, washing, soda boil and other wet processing. They are applicable by all the dyeing and printing processes generally employed for dyes of this type. Many combinations can be discharged to excellent whites with hydrosulfite discharge pastes.

NATIONAL ANILINE DIVISION ALLIED CHEMICAL & DYE CORPORATION

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overhead and postage - are fixed.

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However, the man who receives your letter is

He cannot see

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the typist, the desk, the equipment,

or the office.

BUT HE CAN SEE THE PAPER...AND
THE PAPER IS OF MAJOR IMPORTANCE
IN MAKING A LETTER IMPRESSIVE

The cost of a letterhead on a quality sheet of paper over an inferior sheet is negligible paper over an inferior small fraction of a percent.

So, for all practical purposes, you cannot economize by using a cheap grade of paper on stationery, nor on envelopes and office forms.

CONSULT YOUR PRINTER FOR QUALITY
PRINTING PAPERS FROM HENLEY



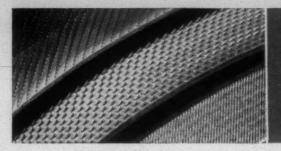
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# Ashworth Tips CARDING

No. 29 in a Series

#### FLATS AND FLEXIBLE BENDS

The lickerin assembly and the flats with all assemblies directly related to the flats, are the most effective cleaning elements on your cards. The lickerin assembly has been discussed, so we give you the following for consideration in connection with the flats and related mechanisms:

- 1. Flexible bends control the setting of flats to cylinder. Probably 90% of the cards operating today have worn flexible bends. To double check your own, we suggest you try the following:
  - a. Set the flats at each setting point.
  - b. Crank flats so that space for setting will be equi-distant between setting points. Recheck setting. You will be surprised at the variation in setting at this point and at the exact setting point.
- 2. Worn flat ends contribute to poor flat setting, particularly when flexible bends are also worn. We have found that this variation in setting multiplies when bearing surfaces of flat ends are worn more than 3/16" in width. Remilling of flat ends is indicated for quality work, and particularly if flexible bends have already been reground. The reworking of flats and flexible bends go hand in hand.
- 3. Flat chains convey the flats in their carding operation and should always be kept under correct tension. Some mills make the mistake of running their chains with excessive tension, resulting in undue wear on the flat driving mechanism and the cocking of flats on flexible bend between the backstand and the second stand from the back. This area does the heaviest carding, so it is important that the flats seat firmly on the flexible bend if you are to get quality work.

Worn chains permit flats to rub on front and back plates, damaging the flat clothing, and are responsible for an excessive amount of flat top waste due to the increase between center distances of flats.

4. Flat driving sprockets and shafts must be in good repair at all times. Worn sprocket shafts cause excessive strain on the driving mechanism, and in some cases it is impossible to keep the flats parallel across the face of the cylinder. The teeth in the flat driving sprocket should be carefully lined up. Should one sprocket be installed on the shaft so that a tooth on one side of the card is slightly

ahead of the same tooth on the opposite side of the card, the flats will not run parallel, and in most cases will hang up, resulting in broken flats, damaged flat clothing and damaged cylinder clothing.

- 5. Flat carrier pulleys should turn freely to facilitate flat operation. Oil regularly and clean regularly.
- 6. The spiral flat cleaning brush should be set accurately end to end giving consideration to length of flat clothing and length of bristles.

Setting bristles too deep will pack waste at foundation of flat wire instead of brushing it out.

7. Be sure large and small rotary brushes turn freely and have good bristles. Also, inspect and keep in adjustment the flat end brushes.

While the quality of your carding starts at the back of your card, you cannot control it or improve upon it unless your flat assemblies are in proper working order.

Incidentally, we specialize in flat end milling and regrinding flexible bends at our Greenville, Atlanta, Charlotte, and Fall River, Mass., shops.

#### ASHWORTH BROS., INC.

American Card Clothing Co. (Woolen Division)

Fall River\*†‡ Worcester‡ Philadelphia\*†‡ Atlanta†‡ Greenville\*†‡ Charlotte†‡ Dallas†‡ (Textile Supply Co.) E. G. Paules, Representative — Los Angeles, Calif.

\*Factory †Repair Shop †Distributing Point
3 Factories • 6 Repair Shops • 7 Distributing Points

#### PRODUCTS AND SERVICES

Clothing for Cotton, Wool, Worsted, Silk, Synthetic Fibre and Asbestos cards and for All Types of Napping Machinery. Brusher Clothing and Card Clothing for Special Purposes. Lickerin Wire and Garnet Wire. Sole Distributors for Platt's Metallic Wire. Lickerins and Topflats Reclothed.

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Ashworth PIONEERS IN CARD CLOTHING

3 FACTORIES . . . 6 REPAIR SHOPS . . . 7 DISTRIBUTING POINTS



#### Staley's offers the textile industry a complete line of Starches, Gums and Dextrins

NEW! STACOLLOID® Gums - A brand new family of starches . . . exceptional noncongealing properties, outstanding viscosity stability, excellent film-forming properties and clarity of solution. Available in a complete range of viscosities at different levels of chemical substitution.

NEW! ETHYLEX Gums — Etherified starches in a wide range of viscosities at various levels of chemical substitution...non-congealing, stable viscosity, excellent film-forming properties, clear cooking solutions with minimum tendency to retrograde on cooling.

NEW! STADEX® Dextrins - White, Canary, and British Gums-tailor-made for exacting requirements. A new concept in degree of uniformity and minimum

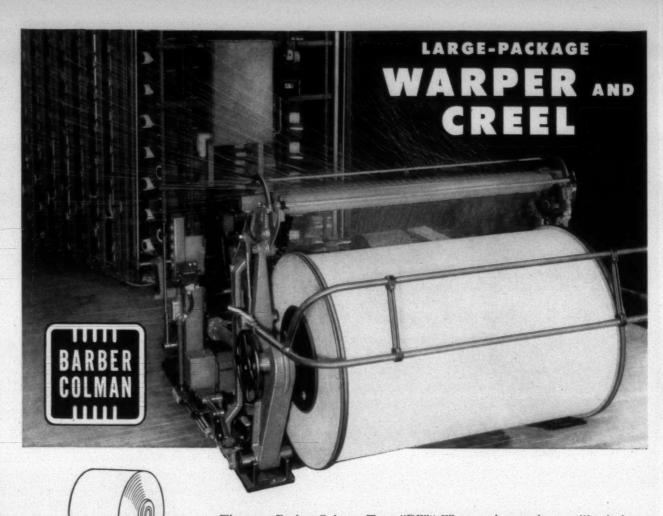
> ECLIPSE® Starches—Acid-modified, thin-boiling starches manufactured to exacting specifications, available in a wide range of fluidities.

> STAZYME® Starch—Uniform product manufactured under close control specifically for enzyme converting.

> General—And also starches made specifically for homogenizers, printing and finishing specialties, and products for back filling or sizing.

A. E. Staley Mfg. Co., Decatur, Illinois





## LARGE PACKAGES HAVE ADVANTAGES IN THE STEPS THAT FOLLOW SPINNING

The new Type "D" Barber-Colman cheese holds 6½ lbs., which is 120,000 yards of 24s yarn, or 2½ times as much as the standard Type "C" cheese. This gives more slasher beams per cheese, even in the 40"-head size, and thus more loom beams per set. This increase in loom beams per set, and the consequent reduction in creelings per week, can provide substantial cost reductions in many mills. Similar advantages are available in the twisting.

The new Barber-Colman Type "DW" Warper shown above will wind slasher beams as large as 40" head. It has all the features of the familiar Type "VW", plus several new ones such as a pivoted comb support which moves the comb forward as the beam fills. The driving drum, clutch, brake, and motor — all of which are larger and more rugged to handle the heavier loads — are now arranged back of, rather than beneath, the beam. The creel shown is not the new Type "DC" Creel but is the standard Type "VC", as the new Warper can be used with either the large or the standard package. For further details, please write for descriptive literature, or ask your Barber-Colman representative.

#### USE BARBER-COLMAN INSPECTION AND SERVICE

For all your Barber-Colman machines, be sure to call on the Service Department of your nearest Barber-Colman office. The men who staff this organization are specially trained and equipped, with a wealth of experience in checking,

maintaining, repairing, and modernizing all types and models of Barber-Colman equipment. They are backed by alert main and branch offices who see that they are supplied with complete and reliable parts and information.

AUTOMATIC SPOOLERS . SUPER-SPEED WARPERS . WARP TYING MACHINES . WARP DRAWING MACHINES

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We're proud that the men who designed and built Amerotron's new plant at Barnwell, S. C., entrusted certain duties to Riggs & Lombard. We produced certain needed equipment . . . and, equally important, we ensured its successful installation. Familiar with all equipment in a completely integrated mill, we fully understand how to integrate our contribution with the overall operation for maximum efficiency. On any installation, we provide plant engineers with a specialized engineering service rendered proficient by long experience and scientific study.

A. One R&L Continuous Crusher. B. Two R&L Stainless Steel Hy-Temperature Stock Dyeing Machines. C. Ten R&L Stainless Steel Atmospheric Pressure Stock Dyeing Machines. D. One R&L Stainless Steel Fulling Mill. E. One R&L Stainless Steel Derby Dry Cleaner. F. One R&L Dolly Cloth Washer.

> When you plan modernization or new installations, consult an "Engineers' Engineer". No obligation!



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#### TYPES OF EQUIPMENT

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Width

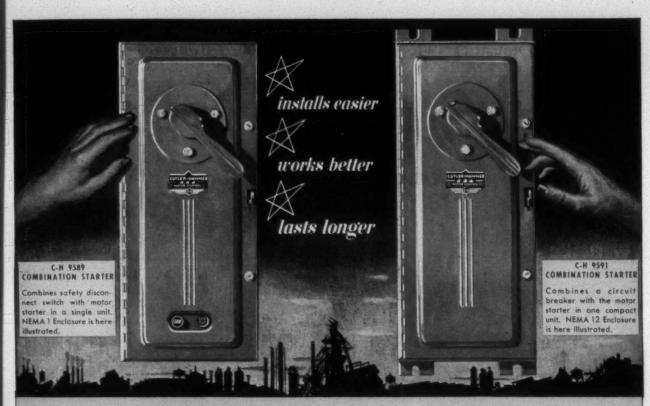
ers, Endless

pers libuting Systems Aachines,

NEN

Bleaching Equipment	Reels
Caustic Washers	Rolls
Progressive Jigs	Miscellane
Kettles	Fulling Mi
Tanks	Rubb
Carbonizing	Vulco
Cloth Carbonizing Ranges	Wood
Cleaners	Washer,
Derby Continuous	Wood
Dry Cleaners	Rubb
Crushers	
Continuous	Soaping
Semi-continuous	Rope Soar
Dyeing Equipment	Soap Distr
Dye Becks	Soaping A
Dye Kettles	Rope
Piece Dye Kettles	
Rug Dye Kettles	Special Machin
Sample Dye Kettles	Squeeze Roll E
Stock Dye Kettles	Tanks
Standard	Miscellane
Hy-Temperature	Size Mixin
Top Dyeing Machines	Storage
Dryers	Trucks
Tenter	Cloth
Fulling Mills	Dye
Cloth Endless Felt	Pin
	Washers
Laboratory Machines	Cloth Wo
Padders	(Bate
Pails	Ope
Ports	Doll
Poleyes	Felt Wash
Pusher Mills	Wringers Yarn Steamers
	TOTA Steamers

#### New Cutler-Hammer Three-Star Combination Starters offer industry important new economies



Convenience and economy are basic advantages of combination starters. Users everywhere say the new Cutler-Hammer \* \* \* Combination Starters bring these basic advantages to new high levels of importance. Contact life is so amazingly improved that maintenance care is never needed in all normal uses. Adjustable load sensing coils permit motors to work at top capacity without hazard to provide maximum production without needless work interruptions. And the widely praised Cutler-Hammer exclusive, full three-phase overload protection in standard combination starters, is optional at slight additional cost.

The three silver stars stand for three new standards



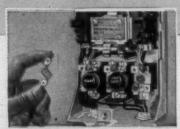
Compare the performance and economies of these remarkable new Cutler-Hammer Three-Star Combination Starters with any you have ever known. Cutler-Hammer Bulletin 9589 Combination Starters incorporate rugged disconnect switches of advanced design (fused or unfused). Cutler-Hammer Bulletin 9591 Combination Starters are equipped with circuit breakers. Your nearby Cutler-Hammer Authorized Distributor is stocked and ready to serve you. Order from him today. CUTLER-HAMMER. Inc., 1455

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Full Three-Phase Protection

Only three overload relays can give complete three-phase protection to avoid motor burn-outs and their costly interruptions to production. And only Cutler-Hammer offers this complete three-phase protection in standard combination starters. You pay only for the third relay, nothing extra for special engineering or special enclosures.



Adjustable Load Sensing Coils

The accurate adjustment of overload protection permits motors to work harder without damage to motor windings. This is more important than ever with the newer type small frame motors. Adjustable load sensing coils in these new starters provide 3% loading accuracy instead of the 10% to 12% accuracy in competitive control.



Superlife Vertical Contacts

Experienced control users insist on dustsafe vertical contacts. And now the famous Cutter-Hammer vertical contacts have been doubly improved. First, their new lightweight design cuts bounce to reduce arcing. Second, any arcing that might occur is now pressure-quenched. Compare performance and see the difference.

## Size fluidity is always right...from cooking to application with

#### **EAGLE®** Thin-Boiling Starches



Higher production rates of modern slashers make the uniform fluidity of Eagle Starches vitally important.

From size kettle to application the viscosity and strength of Eagle brand starches is uniform, assuring you top weave room performance.

Despite continued heating, agitation and pumping, these acid-modified, thin-boiling starches consistently give the precise size fluidity you need in a modern slashing operation.

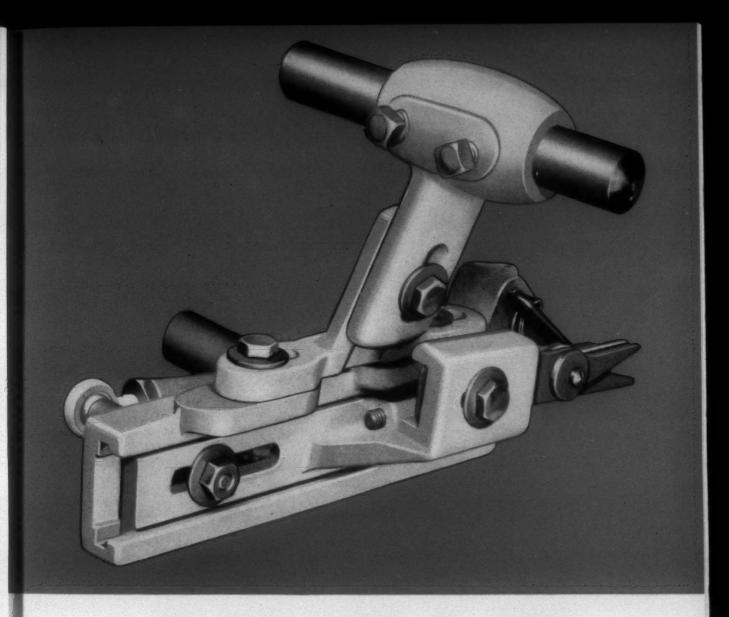
Eagle brand starches produce a uniform size mixture that penetrates the yarn evenly. Where you want more weight of size, or a thicker size film, try Eagle brand starches. They maintain their viscosity and give you a maximum of size concentration. Available in a full range of fluidities, try Eagle brand starches.

Ask the man from Corn Products. Ready to assist you in any way, he has at his disposal the most complete laboratory and technical facilities in the industry. The man from Corn Products can also provide engineering service for the installation of bulk-handling equipment. Write or phone for information, there is no obligation.



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Corn Products makes these famous starches for the textile industry— Eagle • Foxhead • Globe • Hercules • Ten-O-Film • Globe Dextrines & Gums



# 23,817 NOW IN USE IN MILLS THROUGHOUT THE WORLD



Improved Filling Knife Assembly cuts and holds better on yarns ranging from 15 denier monofilament nylon to 4's cotton flannel napping.

... a sales record which proves the acceptance of the new #25 Draper Thread Cutter.\*

Reasons for this widespread acceptance are:

- 1. Maintenance costs are reduced with 20 fewer parts used in assembly.
- 2. It is easily applied without changing existing parts on the loom.
- 3. Settings are easier to make easier to maintain.
- 4. Drag-ins are greatly reduced.

23,817 mill applications also proves the #25 Draper thread cutter, with its full range of adjustments, increases production and lowers cost.

\*Patents Pending



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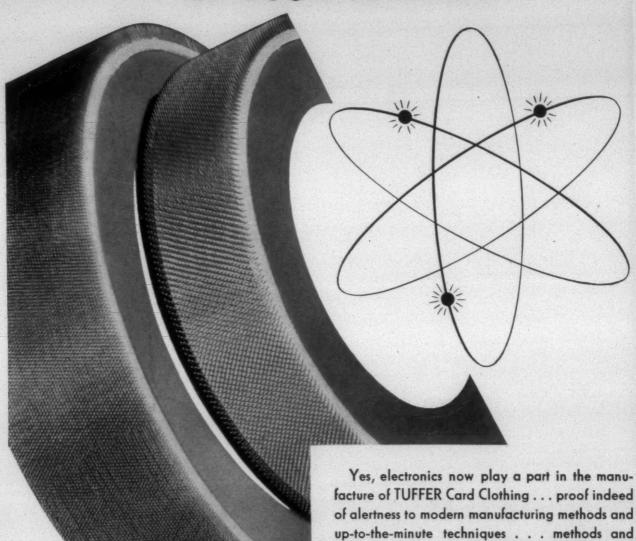
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Soromine CS is easy to apply — in the last rinse water in the dye beck, hosiery machine, jig or print washer; in the starch mangle, pad or quetsch. Soromine CS & versatile — it can be applied to natural or synthetic fiber textiles, either alone or in resin finishes.

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Ask us about the use of Soromine CS in your textile finishing operation.

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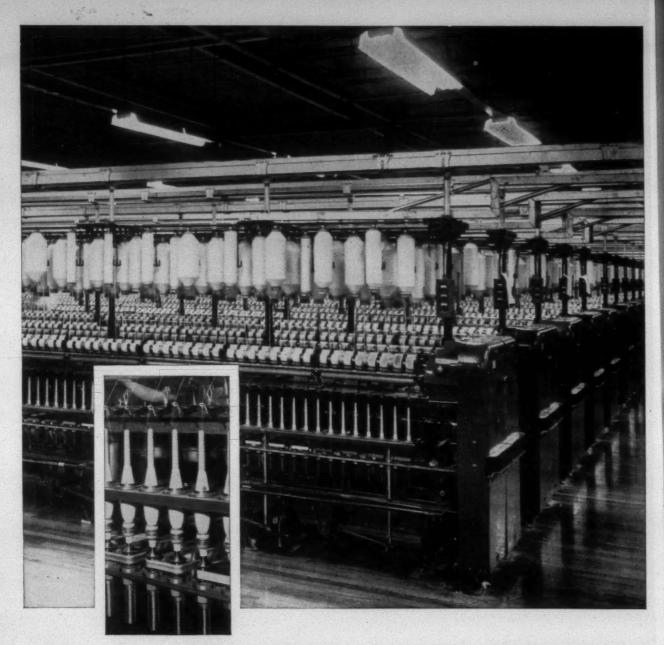
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# Marquette TOP DRIVE FILLING SPINDLES increase production 15% to 18%

The above photographs show a typical installation of the new Marquette Top Drive Filling Spindles, with hardened steel blade and exclusive full-floating footstep bearing.

Marquette Roller Bearing Spindles are giving excellent results in many mills. Among their advantages are higher spindle and front roll speeds, low ends down, savings in doffing, savings in the weave room, and savings in power and maintenance.

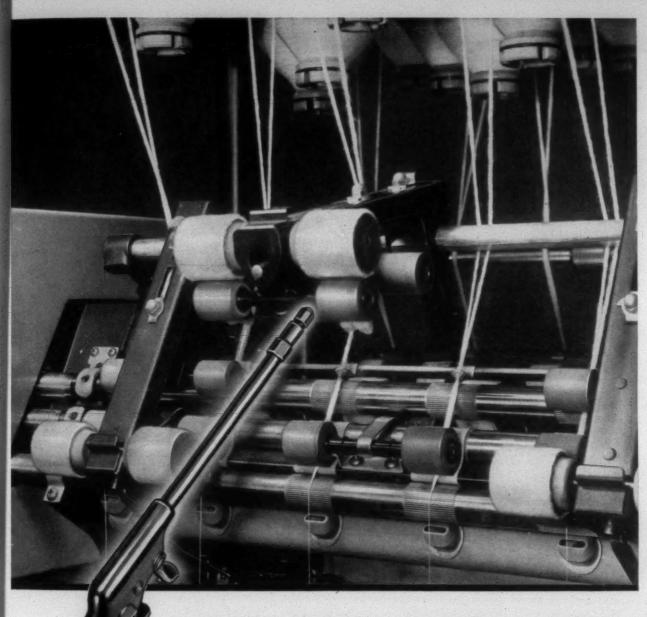
Marquette Roller Bearing Spindles can produce more yarn at lower cost in your mill. We'll be glad to prove this through a test installation. Contact our home office or one of our representatives. Representatives: WILLIAM P. RUSSELL, BOX 778, ATLANTA, GA. C. H. WHITE, MOUNT HOLLY RD., ROUTE 6, CHARLOTTE, N. C. R. MICHAEL TURNER, 100 CHESTNUT STREET, CLINTON, S. C.

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Protect your yarn and roll coverings from needless spoilage...switch to Sinclair NO-DRIP lubrication! These outstanding lubricants give complete bearing protection, yet stay put. They won't creep or throw out of bearings—remain fluid—permit rolls to turn easily and smoothly.

Sinclair NO-DRIP Numbers 8, 12, 15 and 17 can save you money through smooth operation and low maintenance costs. Call your Sinclair Representative today, or write for the new NO-DRIP pamphlet to Sinclair Refining Company, Technical Service Division, 600 Fifth Avenue, New York 20, N. Y. There's no obligation.

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# Mulghing Mulghing

[Exclusive and Timely News from the Nation's Capital]

Pre-election "nerves" are spreading in Congress, and action on vital bills is being delayed, including measures in the Administration's program. A long drawn-out contest is ahead before the multi-billion dollar highway building bill clears the hurdle of Senate and House conference, and the school construction bill has small prospect of passage.

Campaign maneuvering has stepped into first place in legislative activity, with an over-all intent to please the voters. A farm relief bill of sorts will go to the President, but with no assurance that he may not veto it, too. Union lobbyists are demanding action on a half dozen bills, including changes in Taft-Hartley. Action on any of the proposals is not in sight.

New bills that put brakes on a free-wheeling Supreme Court are pouring into the Congressional hoppers. They range in scope and purpose from limitation in service and minimum experience of judges to powers to set aside legislative intent by judicial fiat. Criticism of the Court over recent decisions is at the highest point in over a generation, and leveled primarily at dicta and dogma used to decide broad questions and issues.

The bill offered by Chairman Howard Smith, of the House Rules Committee, goes very far in establishing the domain of states' rights. This bill would give state legislatures full co-equal rights in all fields of legislation unless Congress, by express provision in a statute, provided otherwise. It would uphold the clear right of states to enact right-to-work laws, and Federal law could not be extended into this domain by judicial fiat.

Selection of Senator George for a high post by the President goes far to pave the way for more support for the \$4.9 billion foreign aid program. Unfettered now by political factors on a state campaign, George is free to express his views on foreign policy goals, including continuation of foreign aid. He may soften some of his own objections to long-term commitments which the Administration considers so essential.

Far-reaching changes in the Senate are in prospect next year with the retirement of Senator George. In addition to heading the Foreign Relations Committee, he is a member of the Senate Finance Committee, and is one to whom leaders of both parties have listened, and to whom they have turned for advice. Among all other senators, he has been more able to curb radical left-wingers, and effect compromises in sharply differing viewpoints.

Retirement of Senator George will remove from the Senate its most towering and statesman-like figure, and the South's most potent voice in this generation. Of commanding presence, understanding and vision in domestic and foreign problems, he has been credited with changing votes more often in the Senate through strength of argument and persuasive force of words than any other member of this body.

Highly liberal provisions on Social Security revision, as passed by the House, were thrown out by the Senate Finance Committee. The new Senate proposal would lower the benefit age to 62 only for widows, rather than for all women workers, and wipe out provision to make all permanently disabled or physically



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PAPER

impaired persons eligible for benefits. But strong efforts will be made in the House and Senate conference to retain these provisions.

A former Army purchasing agent told the Senate Investigations Committee he banked \$12,231 more than he earned in a year, and also had money hidden in his home. He said his wife handled the finances, and he did not know how much money she had in the cache. The inquiry is into pay-offs and other irregularities on military uniform contracts. Kickbacks are found to run into hundreds of thousands of dollars.

Pensions plans, including those of unions, are growing at the rate of \$2 billion a year, said Chairman McAllistr, of the Home Loan Board. One reason for this, he said, is the present high income tax rate. He said that pension plans are gradually growing, and coming to be substantial factors in terms and conditions of employment. He feels this trend will continue, and much greater steps should be taken to assure the solvency and security of all pension funds.

Break into open warfare is rapidly building up in the relations between George Meany and Walter Reuther, with more weakening of the new big union merger. The difference pivots on Reuther's meddling in foreign affairs, and imposing his personal viewpoint as big union policy. Reuther is reported to have told foreign unionists that he, and not Meany, is the big union spokesman on international matters. Reuther has also implied he was forced into the union merger by other C.I.O. leaders against his own wishes.

A.F.L. leaders assert Reuther is working hard to build up the industrial division of the merged union, which he heads, at the expense of craft unions. His aim, they assert, is to make it the dominant part of the merged union, with himself as the chief union figure, and allowing him to speak independently either of Meany or of the big executive council. Other leaders say there is a lot of substance in what John L. Lewis said of the merger being "a rope of sand."

Secession of unions in the South from the A.F.L.-C.I.O., and formation of a "Southern Federation of Labor," is becoming more likely. Top union officials are told that support of Negro political and propaganda units by top union leaders in the North is "accentuating" formation of a Southern federation. A number of resolutions supporting withdrawal have been passed by Southern locals, with accompaning statements that "the South needs its own federation." One A.F.L. official said "if they want to abandon their unions for racism, let 'em go."

Petitions for decertification of A.F.L. unions are being circulated in larger industrial areas in the South, but none have been filed with N.L.R.B. The uppermost question is how much of dues funds paid into the big Northern unions are being poured back to support Negro groups and integrationists seeking a toe-hold in the South. Northern leaders have declined to reveal the amounts. So far the Southern insurgent movement is lacking in effective leaders.

Mass lobbying on a vast scale took place when 2,500 union members called on senators and House members to influence their votes on five pending bills. In the week-long lobbying effort, the unionists focused attention on amendments to the Taft-Hartley and Bacon-Davis Acts, wiping out secondary boycott provisions, permitting pre-hire contracts for unions in the building trades, and eliminating the Federal provision for states' right-to-work laws.

Tax experts say that under the Hoover Commission proposals, a tax cut of \$4 billion a year is highly feasible and possible. They say it can be done by getting business-style accounting methods into the government, including Congress seeing what each agency is doing with the money it gets, and what it is giving in goods and services. Too many agencies, they say, play the year-end game of "getting obligated all that is left." Sometimes they let contracts to bind up the money, only to cancel them after the new fiscal year starts.

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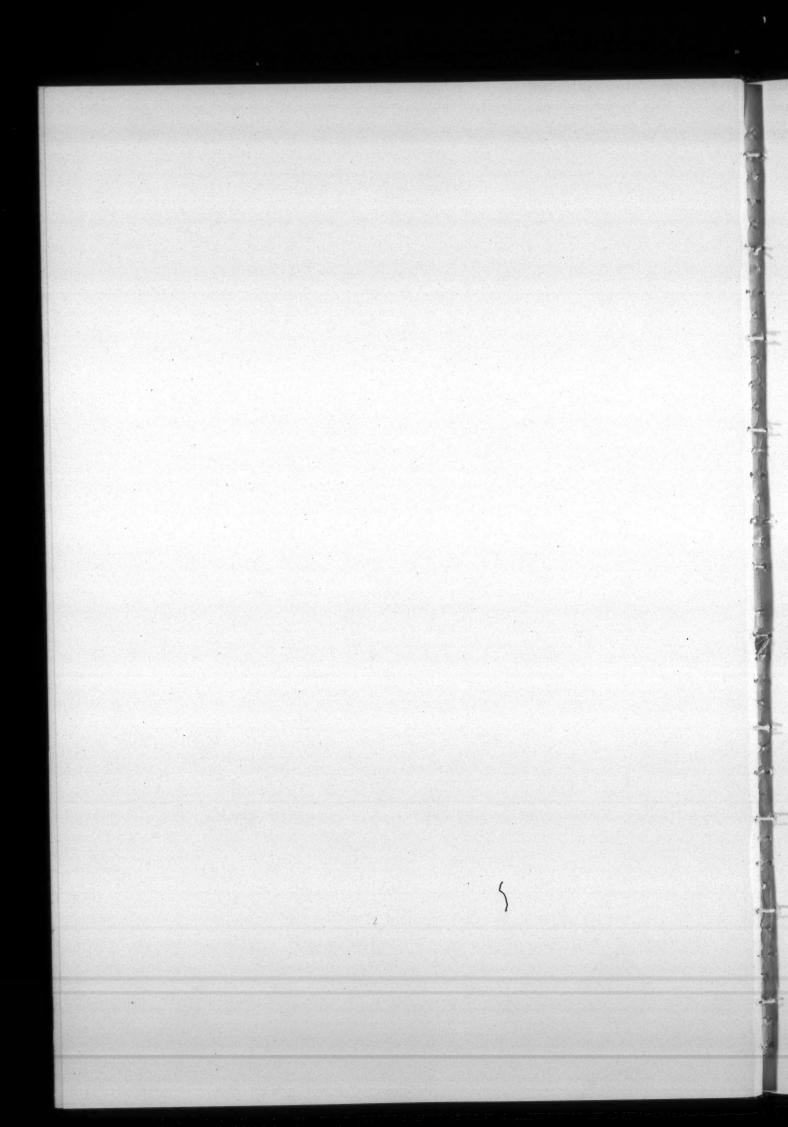
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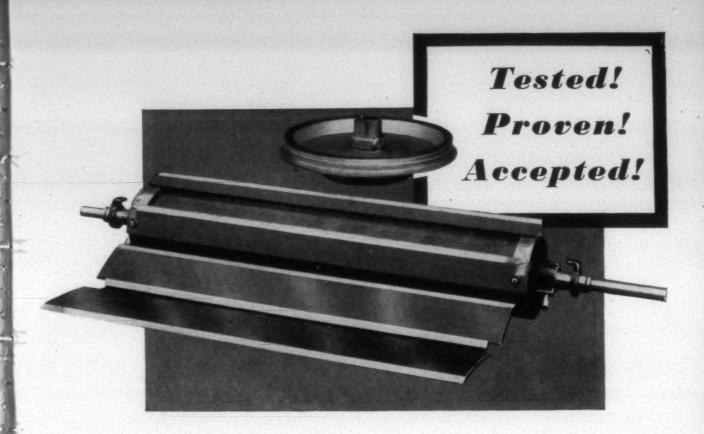
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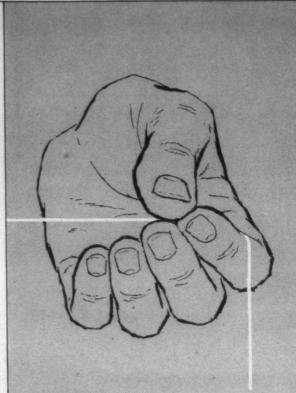
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**Accurate Controls** 

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HIGH SPEEDS Sustained speeds of 125 yards a minute — without noticeable vibration — are made possible by extra heavy construction and by Cocker's patented Friction which will not run hot regardless of speed or load.

ACCURATE CONTROLS All operations are under automatic or push button control at all times. Speed is rheostat controlled with stopping, starting, and intermediate push button control. Variable speed DC drive maintains even tension at all times. Tachometers, output and stretch indicators, etc. have long been standard equipment on all Cocker Slashers.

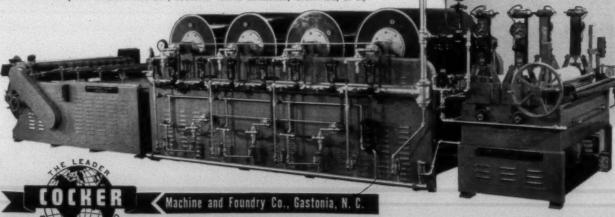
EASE OF OPERATION Special Cocker features improve operating efficiency. Among these are air operated carrier and delivery rolls fast and simple latch release for beam doffing air operated ironing compressor roll with finger tip variable pressure control.

SMOOTH, HARD BEAMS The new Cocker Differential Compensating Friction Control with DC Drive produces smooth, hard, even beams and gives 20% to 25% more yarn per loom beam. Also available with multi-motor drive.

Cocker Slashers will handle all types of yarns. Built with 5 to 13 cylinders and up to 144" in width. Call on Cocker for full information and engineering service.

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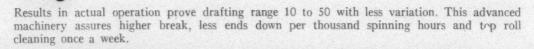


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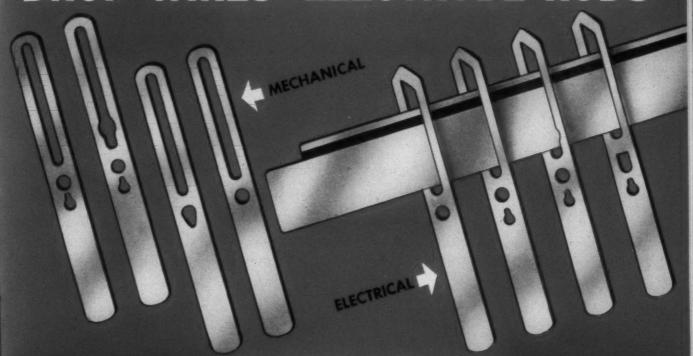
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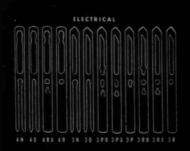
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Large stocks on hand guarantee prompt delivery of STEHEDCO Supreme Quality Drop Wires in all weights for all sizes of Warp Yarn, supplied in galvanized, copper, nickel finish and stainless steel.

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STEHEDCO Electrode Rods are made of Stainless Steel with Fibre Insulation and may be had with special plastic insulation of high dielectric strength, for use with electronic or other sensitive relays.

When ordering Drop Wire, Mechanical or Electrical, furnish sample or use the diagram illustrated. (to left) Designate style, Width, Thickness, and Finish desired.

When ordering Electrode Rods specify style and length. (see diagram to right).

Rod Extension Both Ends

STYLE B illustrated in photograph Both Ends Identical STYLE C Channel Extension Both Ends

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# NEW TWISTS in stretch yarn processing

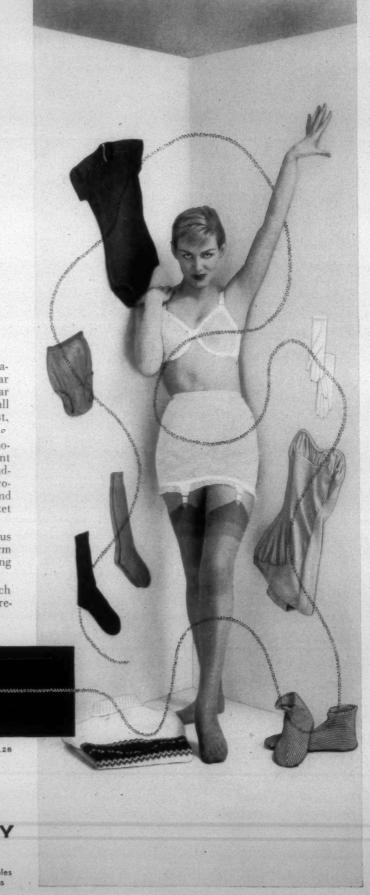
Universal's complete service covers every factor from pirn to finished product

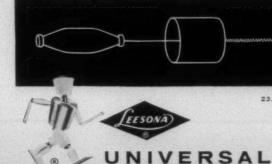
Universal is the recognized headquarters for machines especially developed to handle all the popular new bulk and stretch yarns. Besides the women's wear shown here, countless garments for both sexes and all ages are made of new "magic" yarns processed on fast, economical Leesona Machines.

To aid you in producing yarns with highest sales potentials, the Universal Yarn Evaluation Department has been established. Its purposes are: to set up standards for processing and testing stretch yarns; to provide mills with samples; to suggest test procedures and appraise samples from mills; and to check new market possibilities

And in addition, Universal offers its famous Leesona Pay-As-You-Profit Plans — for long-term purchase or lease of new machines without weakening your financial position.

Investigate these valuable aids to successful stretch production — and profits. See your Universal representative or write direct.





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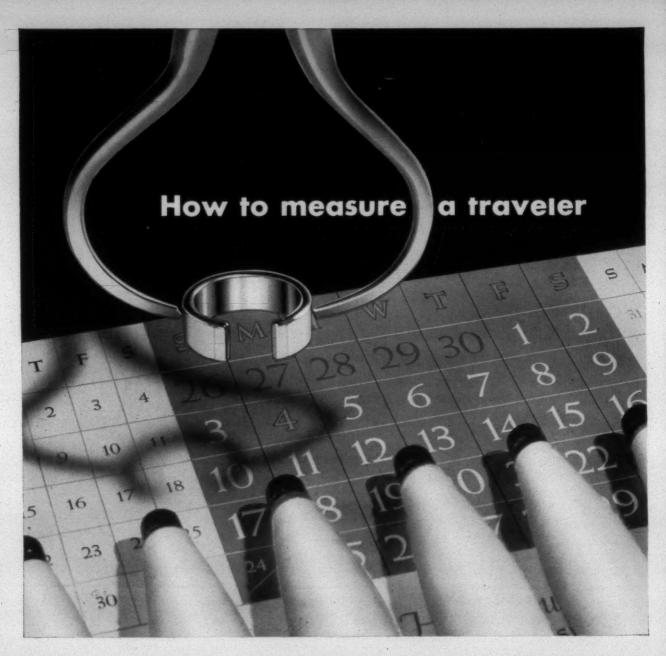


- The chain drive to replace the old 14/76-tooth gear drive. A silent drive of great flexibility.
- The chain drive from the vertical calender rolls to the draw rolls and screens. A simple, silent drive which provides accurate control of the draft between the screens and draw rolls, and those rolls and the vertical calender rolls.
- The chain drive from the vertical calender rolls to the fluted rolls. A silent flexible drive permitting close control of the draft between the vertical and the fluted rolls.

Note also the roller, on Oilite bearing, which holds the calender rack in place. This replaces the old shoe. The calender rack cross-shaft is on ball bearings-no binding!

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Measure a traveler by days of trouble-free service, and by pounds of first-quality yarn delivered. Travelers vary widely by this test, even though they look alike and meet dimensional specifications.

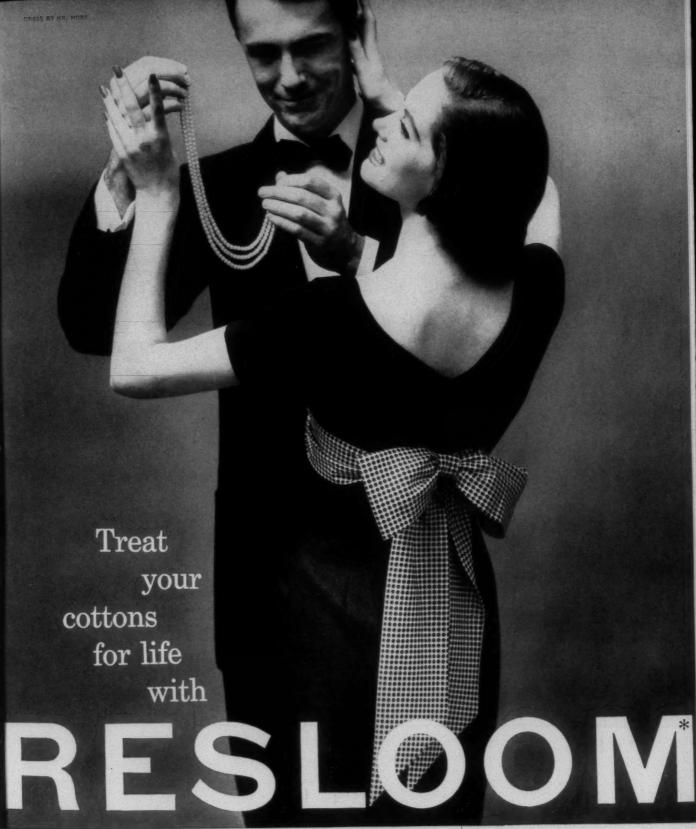
Under any conditions, you can be sure of maximum production per traveler when you rely on Victor experience and quality control. That's the reason why Victor Travelers are chosen for over 12,000,000 spindles. Mill men everywhere find that Victor quality pays off, consistently, in longer traveler life . . . with fewer ends down . . . at higher spinning and twisting speeds.

A Victor Service Engineer will help you select Travelers that measure up to maximum production on any yarn you are running. Write, wire, or phone for prompt service.

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Remarkable performance is reported for cottons treated with Monsanto cyclic urea resin. Resloom E-50 produces long lasting finishes that require little or no ironing.

After repeated laundering, the treated fabrics also demonstrate outstanding crush resistance and dimensional stability.

Unlike most other thermosetting resins, Resloom E-50 is designed to react exclusively with the fabric rather than with itself. Its active ingredients diffuse into the interior of cellulosic fibers and actually modify fiber characteristics.

Call in Monsanto for expert counsel on how to "treat your cottons for life." In addition to Resloom E-50, Monsanto also supplies melamine finishing resins, tradenamed Resloom HP and M-75, as well as Catalyst AC for stepping up curing efficiency. Write for technical bulletin and experimental samples. Monsanto Chemical Company, Plastics Division, Room 1019, Springfield 2, Mass.

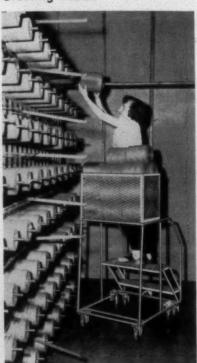
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#### Colorspun Carpet Staple

Colorspun rayon staple for carpets will soon be produced by American Viscose Corp., in addition to the Avisco carpet rayon now available. Colorspun is the Avisco trade-mark for solution-dyed fibers. American Viscose, the largest U. S. producer of rayon staple for carpets, has been producing Colorspun filament yarns and staple for apparel and home furnishings for several years and is currently expanding its color range in these fibers. The color range of Avisco carpet rayon staple will be limited to a few basic shades.

(Request Item No. E-1)

#### Creeling Ladder



Mobile ladder for creeling (The Bally-more Co.)

The Ballymore Co. announces the development and production of a creeling ladder designed to facilitate textile handling. The unit consists of a mobile ladder with a large metal basket-type container mounted on top. It enables the user to speed operations by carrying a quantity of cheeses or other items quickly and easily from one location to another. High places can be reached safely without awkward straining. The ladder rolls smoothly on 4" ball-bearing casters and locks to the floor tightly by a foot-operated Ballylock. The manufacturer points out that the individual mill can save time and em-

ployees' energy by eliminating the necessity to reach down to the floor for items for the required height. In addition to the 2-step model illustrated, this ladder is available in other models according to the customer's specifications.

The sturdy, all-welded steel construction of the unit assures long wear. The basket is 14" deep, 16" high and 25½" wide. Capacity is better than 105 lbs. The creeling ladder is 54" high (over-all), 25½" wide and 34" deep at the base. Height to top step is 22". Handrails are provided for added safety. (Request Item No. E-2)

#### **Cutting Machine**

Sjostrom Machine Co. announces the development and completion of a new cutting machine for textiles designed to automatically follow a cutting line or thread and also cut between woven or printed patterns. This has formerly been an individual hand operation.

Photo tubes guide the rotary knife across the material to be cut, following a line in the material. When this line is irregular, the knife moves along the same path, thus making the cut exactly where necessary even when there are bends or curves in the cutting line, the company points out. The same is true in cutting between patterns where there is no cutting line in the material. In this case, the knife follows a line half-way between the patterns.

The operation of the machine is intermittent. As soon as the material is pulled forward by automatic fingers, photo tubes center the rotary knife on the cutting line. As the knife proceeds across the material the electric eyes move with it and by energizing magnetic clutches, maintain the knife exactly on the cutting line until the cut is completed. As the rotary knife is returning to its original position, it is lifted up, and during its return the fingers are pulling the

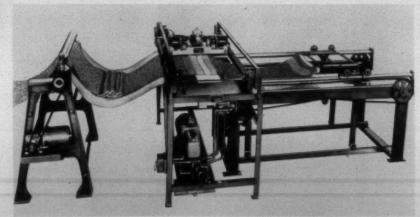
next article forward under the knife. When the knife returns to its original position, electric eyes center it again on the cutting line and the next cut is started. Meanwhile, the cut articles are stacked neatly one upon the other.

Sjostrom reports that the new machine is adaptable to handkerchiefs, towels, napkins, tablecloths, etc., in fact, any material with woven or printed patterns where the difference in light penetration between the background and the pattern is 10% or more. Production ranges from 15 to 40 articles per minute, depending on the length and width. No operator is required except to bring material to the machine and remove the stack of cut articles, the company points out. (Request Item No. E-3)

#### High-Speed Gill Reducer

A new, high-speed, single-head, heavy-duty Gill Reducer, equipped for single-can or single-ball delivery with the Raper Auto-leveller has been produced and marketed by the Holdsworth Mfg. Co. Inc. The Raper Autoleveller automatically varies the draft of the Gill Reducer to which it is applied to insure a constant weight delivered by the front rollers, independent of any variation of thickness of the ingoing sliver.

The Raper Autoleveller, manufactured by Prince-Smith & Stells Ltd. of Keighley, Yorkshire, England, is a self-contained unit, which is attached to a new, high-speed Gill Reducer. Its function is to measure by means of rollers the thickness of the ingoing material and then to automatically regulate the draft after a suitable time delay to maintain levelness of sliver. This is effected by mechanical means through speed changes of the fallers of the high-speed Gill Reducer. In this way, the Autoleveller automatically maintains a constant weight per unit length delivered by the drafting rollers of the Gill



Automatic machine for cutting textiles (Sjostrom Machine Co.)

# ROBERTS Spinning

# ROBERTS HICH DRAFT

#### ROBERTS SPINNING PROVIDES:

- Better yarn quality
- Higher production per spindle
- Increased package sizes
- Lower maintenance expense
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#### COMPARE ALL 3

For high production, top yarn quality, and dependability, Roberts Spinning is second to none in America today—and, at the lowest investment per spindle!

#### 21/4 MILLION SPINDLES

In Changeovers and complete Frames—Roberts Spinning has been overwhelmingly accepted by American mills—over 24 million spindles now equipped with ROBERTS HIGH DRAFT.

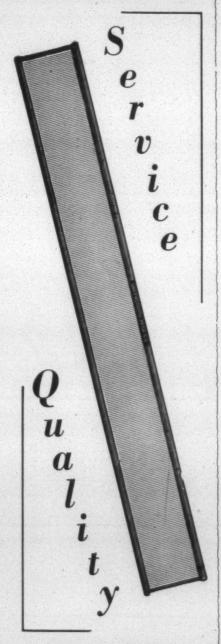
Available in 39 inch, 36 inch and the new Roberts 25 inch width Frames.

All standard features used on Roberts Spinning Frames can be adapted as Changeovers to your existing frames.

ROBERTS COMPANY

SANFORD, NORTH CAROLINA

# STAINLESS Steel Reeds



FOR THE WEAVING OF ALL FABRICS

Greensboro
Loom Reed Co., Inc.
GREENSBORO, N. C.

#### FOR THE TEXTILE INDUSTRY'S USE-

Reducer. It has a wide range of rectification—plus or minus 15% variation of ingoing sliver thickness. Although any Gill Reducer materially improves short term unevenness, the Autoleveller essentially rectifies long term variation, thereby allowing weight and count integrity in the roving and spinning operations, Holdsworth points out.

Autoleveller Gill Reducers when used after Noble or French combing show considerable increase in the efficiency, thereby greatly increasing production of that operation, and allowing the top maker to deliver a superior top of maximum evenness and guaranteed weight, it is said. When used in the first drawing operation, the Autoleveller Gill Reducer rectifies existing unevenness from dyeing, blending or recombing. The new Holdsworth Gill Reducer is a heavyduty type, allowing ingoing weights up to 6,000 grains per yard and is equipped with a heavy-duty coiler able to deliver an end weighing up to 6½ ozs. per 5 yards.

(Request Item No. E-4)

#### **Gwaltney Frame Bobbin**

A new bobbin for the Saco-Lowell Gwaltney SG-1 spinning frame, featuring a new development in plasti-welded construction, is announced by American Paper Tube Co. Taking the synthetic bobbin originally accepted for the Gwaltney frame several years ago, American Paper Tube reports it has conducted nearly 2 years of research and improvement, resulting in a new bobbin with a precision-molded thermosetting plastic tip and seat section, comprising a rugged all-plastic tip of tremendous toughness to withstand hardest mill usage and a pressuremolded seat insuring permanent precision of fit, concentricity and alignment, plus easy doffing. The thermosetting plastic tip and seat section is fused together with the synthetic tube by patented "plasti-weld" into a unit of permanent precision. The homogenous composition of the tube, the company points out, plus impregnation and baking, makes it free from warping, splitting or chipping; heat and friction-resistant; unaffected by moisture in any form whether humid atmosphere or steaming treatment. (Request Item No. E-5)

#### Wica Softener Apt

Wica Chemicals Inc. has announced the addition of Wica Softener Apt to the company's line of synthetic organic chemicals. Wica Softener Apt is a 50% active amphoteric compound especially recommended for use in resin baths and for application to fibers normally difficult to soften. Even exhaustion allows low usage amounts and its ease of dispersion is attractive, according to Wica officials. Wica Softener Apt exhibits excellent resistance to yellowing at high temperatures and is compatible with a wide range of finishing materials.

The softener is reported to be resistant to laundering and dry cleaning, and to show excellent resistance to chlorine bleaching treatments. Its amphoteric nature allows for compatibility over a wide pH range, thus

offering the wet processor a versatile finishing assistant. Improved properties of tensile strength, sewability and durability of softness are claimed with its use. Samples and specific recommendations as to the use of the new product can be obtained by writing on company letterhead to this journal's reader service department.

(Request Item No. E-6)

#### Skid-Proof Floor Surface



Aluminum finish floor finishing compound (The Hallemite Mfg. Co.)

The Hallemite Mfg. Co. is now offering its Heavy-Duty Grip floor finishing compound in brilliant aluminum finish. The product makes any surface skid-proof, Hallemite reports, and assures firm footing and positive traction on floors, stairs, platforms, landings, ramps, etc. The product brightens and greatly increases visibility on surfaces wherever it is applied. It sticks to anything -metal, wood, concrete, even glass-can be used indoors or out, is immune to water, gasoline, oil, grease, solvents, etc. Sandpaper-like in texture, it reportedly wears like iron even under heavy truck traffic. Heavy-Duty Grip comes ready-mixed for quick, easy application with trowel or any flat-bladed spreading tool. It is self-bonding and ready for traffic overnight, Hallemite points out. In addition to the brilliant aluminum finish, it is also available in neutral brown for application where higher visibility is not essential.

(Request Item No. E-7)

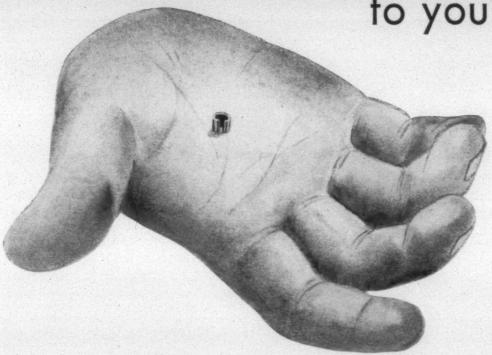
#### Spray Lubrication

American Resin Corp. announces that Spray Graph, the new instant-drying, longlasting graphite lubricant, is now available in 6-oz. spray containers. Application of Spray Graph, which is said to be effective when applied to either metallic or nonmetallic surfaces, substantially increases the life of moving parts, steps up efficient operation and reduces maintenance costs, the company points out. There is no surface build-up or drippage of the lubricant. Spray Graph provides effective lubrication at temperatures ranging from 100° below zero to 800°F. It does not pick up lint, dust or dirt. Oxidation, corrosion and friction are greatly reduced and "sticking" is prevented, it is said.

Application of the spray is described as a simple operation. After the surface is cleaned with a degreasing solvent, Spray Graph

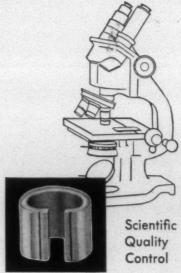
# When it comes to Precision, CARTER hands it

to you!



Carter Travelers are precision made . . . precision tested, and they hand you greater profits, through savings. Using Carter Travelers, quality goes up, and production goes up, but costs come down. You'll have less ends down, smoother running work at higher spindle speeds, and stronger, finer yarn.

Metallurgical engineers check every step in manufacturing Carter Travelers, and make precision tests in Carter's modern laboratory, to assure absolute uniformity of weight, temper, shape and the constant high quality of Carter Travelers.



#### COMPANY CARTER TRAVELER

Division of A. B. CARTER, INC., GASTONIA, N. C. Manufacturers of The Boyce Weavers Knotter

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Hugh Williams & Co.	



#### FOR THE TEXTILE INDUSTRY'S USE-

is lightly sprayed across the surface. The material is immediately impregnated and the surface coated with a long-lasting lubricating film. Spray Graph's physical qualities plus the self-spray method of application permits lubrication of odd sizes and shapes of material as well as surfaces in hard-to-reach locations. The lubricant is also distributed in bulk amounts.

(Request Item No. E-8)

#### Accelerated Soil Tester

The Accelerated Soil Tester developed by the textile resin department of the American Cyanamid Co. is now being manufactured and distributed by Custom Scientific Instruments Inc. This unit provides a method of soiling the specimens for the evaluation of soil retardant finishes on carpeting and fabrics. The ball mill soiling apparatus rotates at 60 r.p.m. with direction of rotation reversing every 2 minutes. The soil is distributed by placing a weighed amount in a perforated steel capsule along with steel balls. As the ball mill rotates, the soil is uniformly deposited on the fabric samples. The ball mill is equipped to hold 4 samples of carpeting or fabric, each sample size 5" x 5". After the samples have been soiled. they are removed, vacuumed, and the soiling is determined by the reflectance meter. Tests with the soil tester have been correlated with actual floor tests by Cyanamid's textile resin (Request Item No. E-9) department.

#### Acetate Bulked Yarn

A new acetate bulked yarn is being produced by Celanese Corp. of America. The bulked yarn is being made currently in limited quantities, both natural and solution dyed, and is expected to be in volume production shortly. Timed to meet established fabric demands in both home and apparel fields, the new acetate yarn reportedly provides a fresh creative approach to texture where dry, crisp and worsted effects are required. This bulked fiber makes possible the desirable loft, light weight and subdued luster necessary to achieve the luxurious hand and look of finer fabrics, Celanese states. In addition to natural yarn, Celaperm bulk yarns in a number of colors and black will be available. A substantial number of textured fabrics woven with the new Celanese bulk yarns have been made up for the guidance of mills and converters. These demonstrate the newer style effects that can be achieved with (Request Item No. E-10) these yarns.

#### Pneumatic 2-Bowl Padder

The Trumeter Co. has been appointed sole agents in this country for a new pneumatic 2-bowl padder made by MAAG Bros. Machine Works in Kusnacht-Zurich, Switzerland. The new universal padder for impregnation, finishing and dyeing was recently shown at the textile machinery exposition in Basel, Switzerland, and also at the International Fair in Milano, Italy. The machine is fully pneumatic. The pressure between

both rolls and the movement of the finishing trough are made over pneumatic cylinders. This pressure is adjustable between 0 and 12,000 kg., Trumeter points out. The special valve guarantees to keep a pressure which has been adjusted in the machine for a certain process. The working speed is adaptable as required, it is said. Full information on the new unit can be obtained by using this journal's reader service request card.

(Request Item No. E-11)

#### Bench Oven



Model 333 bench oven (Grieve-Hendry Co. Inc.)

Grieve-Hendry Co. Inc. is now offering a bench oven with large working space. Called Model 333, the new oven has a working space of 36" x 36" x 36". A temperature range of 100 to 350°F. makes it practical for many applications including dehydrating bobbins, baking of finishes, etc. Outstanding features of Model 333, Grieve-Hendry points out, include uniform temperature throughout by means of fan-driven forcedair circulation. An adjustable damper gives a wide range of constant temperatures.

The oven is constructed of heavy-gauge steel, with a minimum of 2" of Fiberglas insulation, Inconel sheathed tubular heating elements, and Partlow non-indicating temperature controller. Shelf supports are on centers. Shelves are removable and can be inserted to fit each particular job or removed for use of entire space if desired. The outside cabinet dimensions are 40" x 40" by 431/2" high. The unit is available in 220 volt, 1 phase, 60 cycle or 440/3/60. Available on the unit are a timer, a pilot light which shows when heating elements are on, and an automatic door switch that turns off the blower and heaters when the door is opened. (Request Item No. E-12)

#### Two New Lanasyn Dyes

Two new dyes in the Lanasyn series, for use on wool, silk and nylon, have been announced by Sandoz Chemical Works Inc. Lanasyn Yellow GLN p.a.f. is an improved Lanasyn Yellow GL with higher migration power than the earlier type. It is a homogenous metallized dyestuff yielding bright, neutral yellow shades on wool, silk and nylon. It has all the dyeing and fastness properties characteristic of the Lanasyn range and is suitable for Vigoreux printing. Descriptive material on Lanasyn Yellow



Type of Goods — 39" 80 x 80 4.00-yd. top quality print cloth

No. of Looms — 824

Production per
8-hour Shift — 6120 lbs.

Count of Warp — 31's

Filling — 41's

NO. OF CONVENTIONAL GWALTNEY MILL GWALTNEY MILL 40,032 38,592

Man Hours per 8-hour Shift (Opening and picking through Cloth Room)

744
640

WITH
WOOD

Reduction in Man-hours in Gwaltney Mill

13.98 %

(Opening and picking through Cloth Room)

9.56

8.22

Increase in Gwaltney Mill

16.3 9/6

# Proof that AUTOMATION BY Saco-Lowellizing IS THE SURE WAY TO INCREASED PROFITS.

Increased production per man hour, higher yield from raw stock and lower production costs can be yours, too, with a Saco-Lowellizing Program. In addition, you will create the improvement in quality so essential in today's competitive market.

Contact your nearest Saco-Lowell Office — one of our Engineers will prepare a "Forecast of Savings" based on Saco-Lowellizing Program for your mill.

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# HOW SOUTHERN STATES COMPLETE COILERS AND CONVERSION UNITS CUT CARD ROOM OPERATING COST

Mill case histories prove over and over that Southern States coiler conversions pay for themselves in less than a year!

Adding up to lower operating costs and savings you can see are—larger cans with increased capacity...renewed life of old coilers, longer life of new coilers...lower maintenance costs...smaller parts inventories...simplified, more efficient handling...plus improved quality.

Recognizing that each mill is faced with different problems, Southern States has produced the most complete line of coiler and coiler conversion units available to the industry. Thus, regardless of sliver handling methods, or condition of existing equipment, Southern States makes it possible for your mill to enjoy all the advantages of larger cans at a price you can afford.

Complete details are in our Bulletin 201, which we'll send on your request. Better still, let our representative show how Southern States conversions can cut your card room costs.



#### **SOUTHERN STATES**

EQUIPMENT CORP.
HAMPTON, GEORGIA

#### FOR THE TEXTILE INDUSTRY'S USE-

GLN p.a.f. is available from all Sandoz offices. Ask for inserts for Lanasyn Pattern Cards, numbers 1220 and 1223.

Lanasyn Red BL p.a.f. is a homogenous metallized dyestuff. It dyes wool, silk and nylon a bluish red. Apart from its use in self-shades, it is said to be particularly valuable as a shading element for beige and grey tones and is suitable for Vigoureux printing. Inserts for Lanasyn cards, numbers 1220 and 1223, illustrate dyeings and list fastness properties.

(Request Item No. E-13)

#### **Dispersing Agent**

A highly effective dispersing agent for many types of dyestuffs has been developed by the research laboratories of the Arkansas Co. Inc. This new product, Dispersinol C, is anionic in nature and gives a pH of 5.8 to 6.0 in water. It has been found superior to most other dye dispersing agents both from the standpoint of rapid action and uniform dispersion of the dyes, the company reports. In addition to its outstanding dispersing properties, it is also said to have excellent levelling and retarding action for many types of dyes and is particularly recommended for use in union dyeings involving a combination of synthetic and natural fibers, such as Dacron-wool blends. For most applications, the use of 1% to 2% Dispersinol C (on weight of fiber) is recommended for light shades, and 3% for dark shades. For pasting up the dye, it is recommended that Dispersinol C be diluted with a small amount of warm water before adding to the dye bath.

(Request Item No. E-14)

#### Bleaching Assistant

A new assistant for use in Textone (sodium chlorite) bleaching has been announced by the Arkansas Co. Inc. This new assistant, Arko Buffer N, is a soft white paste which gives a pH of 8± in water. Its primary functions are (1) to control the liberation of chlorine dioxide in the bleaching operation, thus minimizing the highly objectionable odor characteristic of the Textone bleaching process; (2) to inhibit the corrosion of stainless steel and monel metal equipment used in this process. In most cases the use of 3% to 6% (on weight of fiber) of Arko Buffer N, or an amount equivalent to the amount of Textone used, is recommended. As an acid additive to adjust the pH of the bleach bath the use of acetic or formic acids is suggested, but strong mineral acids, such as nitric or sulfuric, may be used if desired, the manufacturer points out.

(Request Item No. E-15)

#### Ready-To-Lay Flooring

A new "ready-to-lay" flooring that is said to be easier and faster to install than any other industrial type is announced by The Monroe Co. Inc. Known as Nu-Flor, it goes on in ready-made sheets without mix-

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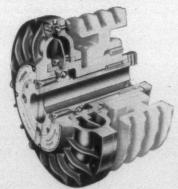
ing, shoveling, tamping, rolling, etc. The material consists of hard, durable preformed sections that are said to outlast concrete. It is manufactured in standard black sheets, 2' x 3' and 1/4" thick. Laid side by side and cemented down with a special adhesive, these sheets form a solid new floor. Traffic can roll over it immediately after application. Nu-Flor is recommended by the manufacturer for use over old concrete, wood or steel floors.

Nu-Flor surfaces are reputed to withstand the heaviest industrial loads and to be excellent for hand or power trucking. Other features are said to include resiliency (easy on feet), quietness which cuts traffic noise and freedom from chipping and cracking. Nu-Flor sheets can be cut or shaped with a linoleum knife to fit around projections, machinery, pipes, etc. The flooring is furnished in standard packages of 8 sheets, each 2' x 3'. One package will cover 48 sq. ft. of (Request Item No. E-16)

#### Heavy-Duty Floor Resurfacer

Flexrock Co. is offering a heavy-duty floor resurfacer developed to resist the attack of acids, alkalis, water, oil and grease. Called Rockflux, the new product is described as a practical finish for application over new, wet concrete or for patching or resurfacing old floors at 1/2" or more. The material has 3 times the compressive strength and 4 times the serviceability of concrete, the manufacturer reports. It is said to be easy to apply and comes in balanced proportions ready to be mixed with water. It sets (Request Item No. E-17) in 24 hours.

#### Flexidyne Textile Drives



Flexidyne dry fluid drive (White Bearings

White Bearings Co. is now offering the new Flexidyne dry fluid drive especially adapted to various textile machines. The drive employs a new principle and reportedly provides a new and better way to handle many difficult textile drive problems. Presently complete package drives are available for cards, spinning frames, roving frames, openers, pickers and warpers. Other textile drives are also being developed with this versatile dry fluid drive, White Bearings

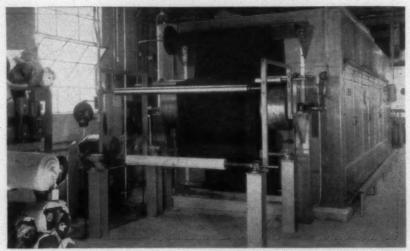
With the new drive, the company points



## gives 35% higher cures . . . Doubles Production at Oxford

through ..

- UNIFORMITY OF CURING
- CONTINUOUS RANGE OPERATION
- CONTROL OF FABRIC TENSION WHILE RUNNING
- ELIMINATION OF RERUNS



The installation of a new Proctor Roller Curer together with rearrangement of existing facilities, has enabled the Oxford Textile Finishing Company, Oxford, N.J., to increase production from 50,000 to 105,000 yards per day. At Oxford, the new curer achieves 85 to 95% cures.

#### **NEW DESIGN FEATURES**

New Proctor \*\* construction reduces installation costs, provides efficient, air tight and well insulated housing—smooth, easy to clean surfaces. Uniform air distribution promotes uniform curing without shading. Variable speed motors power each alternate top roller.

Tension can be adjusted from minimum to maximum while the machine is in operation according to the requirements of the fabric being cured. Unique roll drive permits Roller Curer being placed in range operation with no change in present drive arrangement.

To find out about the complete "Oxford Story" as well as the advantages of a Proctor Roller Curer in your mill, write for latest information bulletin #412.

#### PROCTOR EQUIPMENT FOR THE TEXTILE FIELD

PROCTOR EQUIPMENT FOR THE TEXTILE FIELD

AUTOMATIC BLENDING SYSTEMS • WEIGHING FEEDS • PICKERS • SHREDDERS • BALE
BREAKERS • SYNTHETIC CARDS • GARNETTS • DRYERS FOR FIBROUS MATERIAL • YARN
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• CON-O-MATIC WASHERS • CONTINUOUS BLEACH SYSTEMS FOR TUBULAR KNITS •
EQUIPMENT FOR PRODUCING \* REDMANIZED\* ® SHRUNK-TO-FIT FABRICS • CARPET DRYERS



#### PROCTOR & SCHWARTZ, INC.

Philadelphia 20, Pa.

Manufacturers of Textile Machinery and Industrial Drying Equipment

#### FOR THE TEXTILE INDUSTRY'S USE-

out, smoother, softer starts are achieved, preventing yarn and lap breakage and reducing maintenance on motors, gears, belts, bearings and driven machinery: Smaller motors can be used and starting torque can be tailored to driven load requirements by varying the steel shot flow charge. Motor current draw is the equivalent of no-load starting, lowering demand rate and improving the power factor. The Flexidyne operates without slip and at 100% efficiency with built-in protection against damaging overloads, White states. Full information on any of these economical textile drives can be

obtained by using this journal's reader service postal reply card.

(Request Item No. E-18)

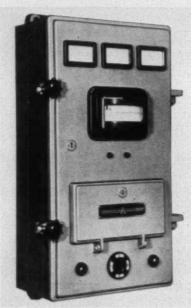
#### National Aniline Vat Dye

The National Aniline Division of Allied Chemical & Dye Corp. has added National Carbanthrene Direct Black 3G Double Paste to its expanding line of anthraquinone vat dyes. This non-drying paste produces greenish-black shades on cotton and rayon. It may be dyed by the various pigment impregnation methods as well as the reduced bath method, and is also suitable for printing. It is unaffected by the presence of

metals in the dyebath and is suitable for use in all types of dyeing equipment, National reports. It exhibits maximum fastness to light in heavy shades, the highest A.A.T.C.C. rating, and excellent fastness to most wet processing, including cross dyeing, stoving and perspiration. This product is suitable for the production of resin-finished dress goods and suitings, as well as materials that are subsequently to be rubberized.

(Request Item No. E-19)

#### Automatic Moisture Control



Textometer moisture control for dryers and slashers (Cosa Corp.)

A new German-made automatic moisture control for dryers and slashers is being introduced in this country by the Cosa Corp. Called the Textometer, the unit automatically controls moisture content of fabrics and warps emerging from dryers and slashers. When installed, the Textometer automatically controls the speed of the machine so that emerging material always has the desired amount of moisture, Cosa points out. The slightest deviation from set moisture percentage is immediately corrected without over-compensation.

Operation of the unit is based on the close relationship between the moisture content of a given textile and its electrical conductivity. Electrodes, in the form of rollers or feeler units, contact the textile and transfer conductivity readings to the Textometer where the corresponding moisture value is indicated. Readings are not noticeably affected by differences in weight, thread count or yarn number of the material. Whenever deviation from pre-set moisture content occurs, control signals automatically sent out from the Textometer change machine speed by means of a pilot motor.

The automatic control unit may be blocked off during shut-down or low-speed periods. After re-start, the speed increase can be locked out until overdried material leaves the dryer. The Textometer is also available without the automatic control unit. in which case the operator regulates machine speed by hand, basing his action on a scale

# STAYS ON TWISTER RINGS

Why pay for liquid oils that drip and spatter—or greases that cause yarn strain from traveler friction on rings? You wind up with broken yarn ends, blackened yarn and lower output.

NON-FLUID OIL provides 100% lubrication, goes further, and increases production by staying on rings and off goods in process.

Write for interesting Bulletin T-16 and free testing sample of NON-FLUID OIL—the Number 1 ring lubricant in the textile industry.

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Birmingham, Ala. Atlanta, Ga. Columbus, Ga.

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WAREHOUSES Greenville, S. C. Chicago, III. Springfield, Mass. St. Louis, Mo.

Greensboro, N. C. Detroit, Mich. Providence, R. I.

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use. because Chemstrand has

# integrated nylon plant (the only one in the country)

source of raw materials

unified quality control system

YOU GET TOP QUALITY NYLON YARN



th Church Street, Charlotte, N. C. . PLANTS: CHEMSTRAND® NYLON-Pensacola, Fla.; ACRILAN® ACRYLIC FIBER-Decatur, Ala.

#### FOR THE TEXTILE INDUSTRY'S USE-

calibrated in moisture percentage, and on green, red and yellow signal lamps which indicate, respectively, dry, normal or moist conditions. A recorder can be installed to record drying action over a period of time.

(Request Item No. E-20)

#### Tire Cord Tensile Tester

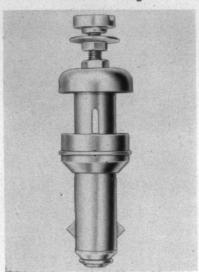
Improved tensile testing of tire cords by means of new Spruance Clamps and auxiliary equipment for a semi-automatic testing cycle, is now available on the IP-4 Tensilgraph, according to an announcement by Scott Testers Inc. The clamps are pneumatically actuated, and are said to have these advantages: automatic adjustment of clamps compensates for varying cord diameters; uniform pressure upon cord assures no crushing, no slippage; twist is not disturbed; uniform tension is assured. In addition to the greater precision thus assured, the new clamping system as integrated into the Scott Tensilgraph also permits much faster production testing.

Operation is as follows: (1) clamps are pneumatically actuated by foot control; (2) 1-hand action inserts specimen; (3) foot switch actuates the following automatic sequence: (a) fixed clamp closes; (b) specimen is straightened to point of initial tension without strain; (c) moving clamp

closes; (d) test proceeds; and (4) after break, both clamps open simultaneously and broken ends clear away. Standard Scott IP-4 Incline-plane Tensilgraph is available with this feature, or it can be applied to existing IP-4 Tensilgraphs.

(Request Item No. E-21)

#### Hartford Bobbin Hanger



Bobbin hanger for overhead creels (Hartford Machine Screw Co.)

Hartford Machine Screw Co. has developed a new, low-cost bobbin hanger, complete with a positive latch. This hanger for overhead creels is built with a sturdy cast body, similar in design to the company's proven split-base spindles. Creeling is faster, the manufacturer points out, because it is easier. The bobbin is very easily slipped up into place, and this trips the latch to send from inside the hanger a pair of ears giving the bobbin positive support. When the bobbin is empty, another slight lift unlatches the ears, which snap back inside the hanger to release the bobbin.

The anti-friction suspension of the bobbin hanger is of free-running ball construction. Bobbins turn with complete freedom, so that the roving is protected from undue tensile strain, and spinning can be uniform, Hartford points out. A brake is available where required. When an overhead creel, equipped with Hartford bobbin hanger, replaces wooden skewers, considerable time is saved in creeling, it is said. Also the open creel construction simplifies cleaning and makes blowers more effective. All parts are either inherently impervious to rust or are cadmium-plated for protection. For mills wishing to examine this hanger in connection with their creel requirements, a sample may be obtained by using this publication's reader service request card.

(Request Item No. E-22)

# PILOT MOUNTAIN NORTH CAROUNA THE PILOT

# The Pilot works with management - building business by protecting workers!

From the telephone switchboard to the textile mill the protective arms of The Pilot cover all phases of Southern industry. Individually tailored group insurance programs stimulate profits and production by improving employee relations, reducing labor turnover, and attracting competent help.

Do You Have a Group Insurance Plan? Write or Wire



#### Filot Life Insurance Company

GROUP DIVISION • GREENSBORD, NORTH CAROLINA
PILOT TO PROTECTION SINCE 1903 • O. F. STAFFORD, PRESIDENT

#### Sandoz Dispersed Scarlet

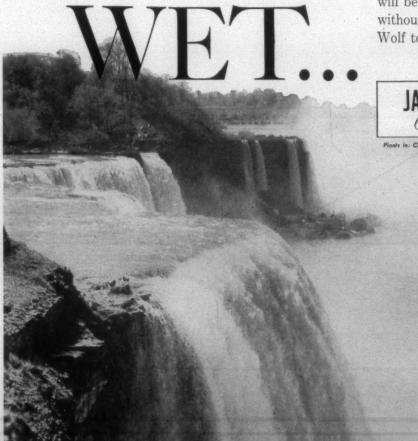
Sandoz Chemical Works Inc. has introduced a new dyestuff, Artisil Scarlet GFL Ultradispersed Pat., for dyeing acetate in brilliant yellowish scarlets possessing exceptional light and wet fastness. Dyeings

# if you think this is

It's almost bone dry if you consider that ordinary tap water could be 1000 times wetter with the addition of Jacques Wolf Wetting Agents.

Making water wetter is only one application for Jacques Wolf Wetting Agents that makes them invaluable in textile manufacture. They have thousands of uses wherever reduction of surface tension, exceptional penetration, saturation, wetting-out, and dispersion are required in the processes of scouring, rinsing, soaping and dyeing.

Test samples and complete data will be sent to you on request and without obligation. Contact Jacques Wolf today.



JACQUES WOLF & CO.
Chemicals PASSAIC, N.J.

Picats in: Clifton N.J. Conletedt N.J. Los Angeles Calif.

#### FOR THE TEXTILE INDUSTRY'S USE-

also show outstanding fastness to gas fading and sublimation, the company reports. The new product is suitable for dyeing nylon, polyester and acrylic fibers, high temperature processes giving the best results on the latter. The shade on nylon is bluer than on acetate. Triacetate fiber is dyed fast to light and washing, dyeing at the boil being the preferred method. Additional information can be obtained by writing for Circular No. (Request Item No. E-23)

#### Crimp Filament Fiber

Culminating an extensive research program in the field of crimpable fibers, American Viscose Corp. has announced the development of a new textile filament which is expected to have new and interesting market possibilities. As described at the annual meeting of stockholders, the new product is handled as a regular fiber but it develops a permanent crimp when wet with water. It has been made in pilot plant and is now being put into commercial produc-(Request Item No. E-24)

#### Silicone Emulsion

A new silicone emulsion, designed for use in wash and wear finishes, has been announced by The Cravenette Co. The emulsion, designated Cravaco A.P.S., is said to be compatible with the various types of resins used in wash and wear finish formulations and aids in making those finishes more effective, when properly applied to a variety of textile fabrics. Such additional features as increased resistance to wear by abrasion, increased tensile strength and very rapid drying are imparted to the fabric, in addition to the many other excellent points in favor of wash and wear finishes.

(Request Item No. E-25)

#### Film-Forming Emulsion

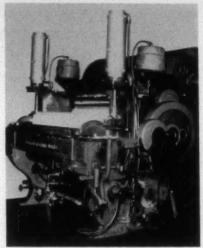
Wica Chemicals Inc. has developed a new, special purpose film-forming emulsion of the acrylic type, designated Wicaset EHF. The polymeric material fuses at 250°F. to form a tough, strong film that is resistant to hot oils, boiling water, light and heat effects. The resulting film is tasteless, odorless and flexible, Wica reports. Furnished as a 50% solids emulsion, Wicaset EHF may be applied by spraying or impregnating or thickened for roller coating.

(Request Item No. E-26)

#### Lubrication Systems

Bowser Technical Refrigeration has introduced a line of CS circulating lubrication systems for providing continuous re-circulation of filtered oil to bearing surfaces of light, medium and heavy-duty machinery. CS systems are furnished complete and consist of liquid pump, tank, filter, heat exchanger, control valve and required piping. The compact, inexpensive systems are said to be easily installed. Since they prevent oil breakdown and the consequent development of sludge and harmful deposits, CS systems provide important protection against costly down-time and expensive bearing repair or replacement. A descriptive brochure is avail-(Request Item No. E-27)

#### Lap Control System



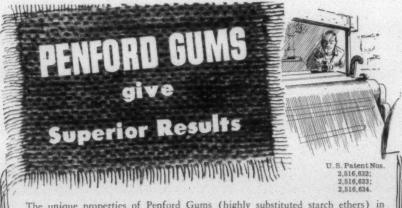
Long pneumatic lap control system (Livingston & Haven Inc.)

Livingston & Haven Inc., working in cooperation with the industrial products division of Westinghouse Air Brake Co., has developed a new pneumatic picker lap control system. According to Livingston & Haven, distributor of Westinghouse pneumatic devices, the system offers the following advantages: (1) increases productionincreases yardage by 7 to 12 yards, with the same diameter lap or more yards with larger diameter lap; (2) maintenance costs greatly reduced—one mill using the system reports maintenance costs cut from \$20 a month to \$1.50 on 1 machine; (3) improved quality control-an equal air pressure is maintained on each end of the lap at all times; this means that a bad lap can be detected instantly since 1 end will be larger than the other; (4) even let-off as lap is being made-pressure on the lap pin is constant; (5) doffing time reduced by 25%; (6) loggerhead adjustment and breakage eliminated; and (7) lap pin breakage minimized. (Request Item No. E-28)

#### Carton Stapler

Container Stapling Corp. has developed a new automatic carton stapler which it reports will cut the cost of closing to less than 1/2-cent for the average carton. The new stapler, Model CSH-2, has no electrical connections, the important design novelty being in the automatic mechanical trip. No solenoids, no relays, no switches, no wiring and no fuses mean no down-time due to electrical failure, the company points out. Fully automatic lubrication is assured by a unique valving arrangement, continuously exhausting nebulized oil over moving parts and eliminating manual oiling.

(Request Item No. E-29)



The unique properties of Penford Gums (highly substituted starch ethers) in both the fluid state as well as in the form of dried films facilitates improvements in warp sizing and textile finishing operations.

**WARP SIZING**—The complete range of viscosities available in Penford Gums makes them adaptable to use in a variety of difficult-to-size spun yarns.

combed cottons

viscose

viscose-acetate blends

hydrophobic fibers blends of hydrophobic and other fibers worsted fibers

TEXTILE FINISHING-The versatility of Penford Finishing Gums with their high degree of reactivity with both melamine and urea-formaldehyde resins affords superior finishes. They are durable to laundering, provide for dimensional stability of fabric, and are wrinkle resistant.

Penick & Ford's Technical Sales Service Engineers are at the service of Textile Finishers and Processors to assist in the selection of the Penford Gums best suited to produce the desired finish on specific finishing equipment.

PENICK & FORD, LVD.

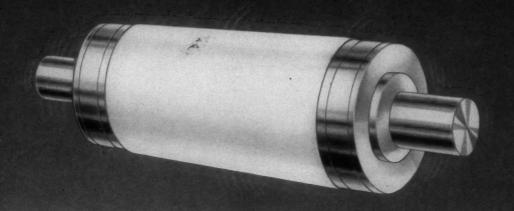
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Valuable Brochure is available upon request. Send for your copy now.

# "HOLYOKE" CALENDER ROLLS





# HOLYOKE MACHINE COMPANY

CALENDER ROLLS for the PAPER and TEXTILE INDUSTRIES WATER FILTRATION EQUIPMENT HOLYOKE, MASSACHUSETTS

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# For the Mill Bookshelf

#### Bronze Card Bearings

White Bearings Co. is offering a new, clearly illustrated 4-page bulletin describing Johnson bronze bearings for all textile cards The bulletin pictures each particular card bearing with card manufacturer's part number and dimensions so the proper bearing can be selected to replace worn bearings to original equipment specifications. The design of each bearing, its alloy, size tolerances and oil grooving all are identical with the original bearing to be replaced. Substitutes for original bearing quality, such as metal inserts or re-worked bearings not to proper specifications, can result in overheating to such an extent that lubrication will not control the excess temperature. Other problems resulting from using substitute bearings or inserts include difficulty in keeping card settings in adjustment and poor fits on shafts, causing galling and seizing. Elimination of these maintenance problems and expense can be achieved through proper card bearing selection as illustrated by the (Request Item No. E-30)

#### Free Wheeling Expanders

Mount Hope Machinery Co. announces the publication of a new 4-page, 2-color bulletin (No. 7640) on the company's free wheeling expanders. The bulletin enters into a systematic and detailed explanation of the expanders as well as where they can serve best in the varied phases of textile handling. The bulletin is quick and easy to read and is illustrated with diagrams and draw-(Request Item No. E-31)

#### Acec Motors Data Sheet

A technical data sheet with dimensions and reference drawings for Acec motors in the new, more compact N.E.M.A. (National Electrical Manufacturers Association) standard sizes is being offered by Acec Electric Corp. Dimensions are given for N.E.M.A. re-rated motors from 1-30 h.p., frame sizes 182-326. The new motors, which apply recent progress in insulation and lamination materials to reduce motor size without sacrificing power output, afford space savings of up to 46%, the data sheet points out

(Request Item No. E-32)

#### Felt Preserver Bulletin

The preservation of felt life is the subject of Bulletin No. 7686 now being made available by the Mount Hope Machinery Co. The bulletin contains much informative material based on a series of tests conducted over a period of 6 months. Details on how felt life was doubled, the use of narrower felts, how felts costs were halved and downtime slashed are touched upon as the direct results of these tests. (Request Item No. E-33)

#### **Facts About Dehumidification**

Abbeon Supply Co. is offering a new 6-page information bulletin (No. 496) on facts about dehumidification. The bulletin gives answers to the 10 dehumidification questions that have been most often asked the company during the past 15 years, and outlines what humidity is and what it does. Illustrations show the company's latest dehumidifying equipment for a range of appli-(Request Item No. E-34)

#### **Auto-Airmat Filter**

A new bulletin describing the Auto-Airmat, automatic dry-type air filter, has been released by American Air Filter Co. Inc. Bulletin No. 234-C explains the Auto-Airmat's application, operation, construction and performance characteristics. Designed particularly for textile mills, the Auto-Airmat is a self-cleaning air filter designed to provide efficient, economical collection and disposal of lint and fibrous materials. The bulletin tells how the air filter not only collects the heavy lint concentrations in the return air from weaving and spinning rooms,

but automatically wraps the collected material in a roll for easy disposal. At the same time fresh media is automatically introduced, by use of a pressure switch, to the filtering area, so that a constant supply of fresh media is available. The low cost of the Airmat paper media makes this method of disposal less expensive than attempting to recondition the media, the company points out.

The Airmat paper media, installed in roll form at the top of the filter section, is transported on a continuous screen down the face of the filter and is re-rolled automatically at the bottom. The lint and dust collected during the time the paper is exposed in the air stream are rolled up with the paper. Disposal of the collected lint is accomplished simply by removing the used roll of media from the bottom of the filter section. With this "by the roll" method, the Auto-Airmat becomes the first practical air filter for the elimination of lint from the air in textile mills, the manufacturer states.

(Request Item No. E-35)

#### Packaged Range Drives

General Electric Co. has announced publication of an 8-page, illustrated bulletin (GEA-6376) on packaged speed variator range drives. The bulletin shows typical installations and describes such features as continuous tension control, dynamic or regenerative braking, jogging or creep speeds, reversing, multi-motor applications, coordinated drives and over-all simplicity and flexibility of the system.

(Request Item No. E-36)

#### Steel Strapping Catalog

A new 44-page steel strapping catalog, containing constructive ideas to help speed packaging, lower handling costs and achieve safe shipment, has been published by Acme Steel Co. The booklet contains more than 65 drawings and photographs showing

#### It's new!



#### FOR LESS SHUTTLE WEAR

The new, improved Truweave Loom Reed with positive control of dent shape from reed to reed "Built to suit your fabric"

#### TEXTILE SPECIALTY CO., INC.

GREENSBORO, NORTH CAROLINA

Manufacturers' agents for textile specialities and equipment

TEXT



# Knocks the stuffing out of size costs in a Gaulin Homogenizer :

Away with the old, and in with the new. Converting size particles by cooking is rapidly becoming the old fashioned expensive way. Hundreds of America's leading mills have found the mechanical conversion of a Gaulin Homogenizer costs less and does a better, more uniform job.

A Gaulin shears, expands and explodes size particles under tremendous speed and pressure. Makes them uniformly finer, faster.

The result? Mills using this process claim greater uniformity of added size on Gaulin Homogenized warp. Report improved size penetration of their yarn, and say the quality of the warp yarn is greatly improved.

Mills that have tried it now have their entire production on Gaulin Homogenized Size. Experience proves that a Gaulin usually pays for itself in less than 12 months.

Give a Gaulin Homogenizer a test in your mill. We'll be glad to install one for you on a guaranteed-performance basis. Whether

you're making cottons, worsteds, or synthetics, write asking for one of our sales engineers to call.

MANTON-GAULIN MFG. CO., INC. 66 Garden Street, Everett 49, Mass.

Southern Representative: W. A. Hewitt, P. O. Box 961, Greenville, S. C. Here are some of America's Leading Mills Using Gaulin Homogenizers

CANNON MILLS
CONE MILLS
PACIFIC MILLS
J. P. STEVENS
PACOLET MFG. CO.
DRAYTON MILLS
GREENWOOD MILLS
PEPPERELL MFG. CO.
AVONDALE MILLS
SEMINOLE MILLS
BATH MILLS
KENDALL COTTON MILLS
BIBB MFG. CO.



# Gaulin

#### HOMOGENIZERS

WORLD'S LARGEST MANUFACTURER OF HOMOGENIZERS, TRIPLEX STAINLESS-STEEL HIGH PRESSURE PUMPS, AND COLLOID MILLS

practical, proven steel strapping applications that are actually in use today. Five basic ways of using steel strapping are described including reinforcing, palletizing and skidding, bundling, baling and tying. A complete description of steel strapping tools and equipment is also included.

(Request Item No. E-37)

#### Stainless Steel Piping

Engineers and maintenance men concerned with the design or maintenance of processing equipment and piping will be interested in an 8-page technical folder issued by the tubular products division of The Babcock & Wilcox Co. The bulletin, designated TB-410, deals with the use of seamless and welded steel pipe and stainless steel welding fittings in processes where corrosion and/or elevated temperatures are determining factors. The folder contains application data on the most widely used stainless steels and furnishes helpful hints on the bending, joining and welding of these products.

(Request Item No. E-38)

#### Measurement Equipment Catalog

Eighty different devices are covered in a 40-page "testing-instruments reference book" published by General Electric's instrument department. Titled the Measurement Equipment Catalog, GEC-1016, the publication contains complete product information including applications, sources of additional information and pictures. Ranging from simple thickness gages to the mass spectrometer leak detector, there are instruments for research, production and laboratory use.

(Request Item No. E-39)

#### Bearing Catalog

A new 72-page catalog on Shafer selfaligning roller bearings has been published by the Chain Belt Co. The new catalog contains specification and data pages on all models of Shafer units. These various models have shaft sizes which range from 3/4" to 7". The catalog describes the Shafer selfaligning principle of concave rollers running between convex raceway, the Shafer microlock adjustment, and Shafer Z seal, etc. Included in the catalog are completely revised engineering data, new load rating tables, exploded view for parts identification, etc. (Request Item No. E-40)

#### Hydrogen Peroxide

A new booklet covering the properties, uses and handling of hydrogen peroxide is being offered by the Solvay Process Division of Allied Chemical & Dye Corp. Illustrated with tables and diagrams, the text of the booklet covers some of the chemical reactions of hydrogen peroxide and suggests applications which include the use of hydrogen peroxide as a bleaching agent. In addition, the booklet describes in detail the storage, safe handling and unloading of hydrogen peroxide in drums, tank trucks and tank cars. (Request Item No. E-41)

#### Carbide-Tipped Drills

Problems encountered when using carbidetipped masonry drills for maintenance work now can be avoided by following recommendations worked out by design and application engineers of the Carboloy Department of General Electric Co. Incorporated in a handy table, the recommendations include speeds, drill sizes, and pressure requirements for applying the masonry drills in piercing cinder and cement blocks, brick, various tiles and stones as well as marble.

(Request Item No. E-42)

#### Demineralization

Graver Water Conditioning Co. is offering a 24-page, illustrated article on all phases of demineralizing. The article, Technical Reprint T-140, discusses in detail the advantages and disadvantages of this process for modern power plants. The paper considers some of the developments, trends and applications of both multi-bed and mixed-bed ion exchange, and uses several case histories as examples. A complete comparison of the 2 types of demineralizing systems is presented as well as some of the important factors that go into the chemical

and mechanical design and operation of these units. Engineers will find the article a worthwhile addition to their library if for no other reason than for the bibliography, said to be the most complete source of information on demineralizing and ion exchange available to date. The list contains 119 seperate items. The paper also has several valuable tables on such items as characteristics of anion exchangers, materials of construction, glossary of terms and specific conductivity of effluent. Flow sheets, descriptive drawings, performance curves, process se-

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Manufacturers of

ALL METAL CARBON AND STAINLESS STEEL REEDS

PITCH BAND AND METAL COMBS P. O. Box 1536 G

GREENSBORO, N. C.

DROP WIRE AND HEDDLE BARS
Phone 4-7631

lection charts and cutaway views are also included. (Request Item No. E-43)

#### **Texrope Drives**

A 44-page booklet carrying handy multicolor tables for quick and easy selection of variable-speed Texrope drives has been released by Allis-Chalmers Mfg. Co. In addition to providing selection tables for A, B, C and D section variable-speed drives, the booklet includes information on design features, drive principles, horsepower rating tables for A, B, C, D and E section belts, a speed range table showing the variation in r.p.m. when using 2 Vari-Pitch sheaves in combination, and accessory equipment for the Vari-Pitch drive. Copies of the booklet, Variable Speed Texrope Drives, 20P50, are available on request.

(Request Item No. E-44)

#### System Engineered Equipment

General Electric Co. is offering a 48-page bulletin—GED-3039—on system engineered equipment for industrial plants. The bulletin gives information on distribution system planning, features, advantages, application, operation and other data on system-engineered equipment for industrial power distribution. (Request Item No. E-45)

#### Bibliographical Abstracts on Redeposition of Soil on Cotton Fabric

(Special Technical Publication No. 173; American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa.; 32 pps., Price, \$1.00)

This booklet contains a review of the literature on the theory and practice of redeposition methods which was presented at a meeting of A.S.T.M. Committee D-12 on soaps and other detergents, March 15, 1955. The review is a consolidation of the more pertinent information developed in the preparation of the bibliography which follows.

#### Human Relations In The Industrial Southeast

(A Study of the Textile Industry; By Glenn Gilman, associate professor of industrial management, Georgia Institute of Technology; The University of North Carolina Press, Chapel Hill, N. C.; 336 pps.; Price, \$5.00.)

This study of personnel history and practices in Southern textiles, stressing the emergence and growth of the mills as regional institutions, clearly shows the distinguishing features of the industry. The impact of local, regional and national influences on the developing pattern of human relations in the industry is traced from its origin to the present day, in order that the peculiar problems of this geographic and industrial area may be understood. The book, which places the field of industrial relations in an entirely new light, should be of great practical value to supervisors, administrators and executives of the textile industry.



# Serving The Textile Industry

#### Parks-Cramer Buys White & Co. and SpinSaVac Corp.

Parks-Cramer Co., manufacturer of air conditioning, cleaning and humidification equipment, has purchased controlling stock in White and Co. and SpinSaVac Corp., both with headquarters in Charlotte, N. C. White and Co. has been in the textile air conditioning and humidification business for 25 years. During 1953 the firm began development of vacuum end-collection equipment. In December 1954, SpinSaVac Corp. was formed by the owners of White and Co. to handle this new equipment. The shops of White and Co. and SpinSaVac Corp. are less than a half mile from the Charlotte plant of Parks-Cramer. It is planned to devote the White-SpinSaVac fabricating facilities almost exclusively to vacuum end-collection and creels, transferring White's air conditioning work to Parks-Cramer. Both White and Parks-Cramer are currently completing additions to their Charlotte manufacturing space. With specialized help from SpinSaVac, Parks-Cramer's sales and erection organizations are taking on these functions for White and SpinSaVac. This leaves White and SpinSaVac largely free for engineering and manufacturing waste recovery and vacuum end-collection equipment.

#### Jones, Gardner & Beal Announces Lab Expansion

Jones, Gardner & Beal Inc., Spartanburg, S. C., testing laboratory, has announced expansion of its facilities to give Southeastern mills a quicker and more complete service on fiber, quality control and finished product tests. The laboratory is under the direction of John Barrentine, who formerly directed the company's laboratory in Memphis, Tenn. All work at the Spartanburg laboratory is done by experienced technicians under A.S.T.M. methods and conditions. The laboratory is located at 976 Pine St. in Spartanburg.

#### Ferguson Gear Installs Heat-Treating Service

What is believed to be the South's first electronically-controlled heat-treating service for gears has been inaugurated in Gastonia, N. C., by Ferguson Gear Co. Research studies in the radiant hardening process employed by Ferguson indicate gear life up to

4 times that of similar gears that are untreated or poorly treated by conventional methods, the company reports. The intense heat generated by a scientifically-controlled mixture forced through specially-designed burner heads is monitored by an electronic heat detector focused on the slowly rotating gear. Thus the hardening is said to be 100% uniform from gear to gear, as well as from tooth to tooth. Only the web and bore emerge as unhardened, with absolute minimum of distortion. The new installation will handle gears from a diameter of a few inches to 17", and from minimum face widths of ½" to 6", Ferguson reports.

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#### National Starch Reports On Expansion Program

National Starch Products announces that the installation of a new method of separation at its Indianapolis, Ind., corn refinery now enables the plant to turn out starch of the highest purity. The new separation method, made possible by the use of Dorr-Clone separators, reduces substantially the residual protein content of the starch, according to Dr. R. W. Merritt, vice-president of manufacturing. The Dorr-Clone units, he points out, separate the starch from the



gluten (protein) by a cyclonic process which in action is similar to a miniature hurricane, with the starch and gluten forced through tapered tubes under pressure. In the center of each tapered tube, a vortex forms in which there is no disturbance, thus permitting a clean separation of the 2 materials. The company's Indianapolis plant, he said, is the first corn starch refinery in the country to be fully equipped with the Dorr-Clone units. Their installation at the plant is another step in the company's current \$4

million expansion program.

National Starch Products has renewed its college scholarship program on a broader basis, according to Frank Greenwall, president. The program is designed to help students in the general fields of chemistry and chemical engineering. Applicants must need financial assistance and be of outstanding scholastic ability and high character. The schools involved are Columbia University, Case Institute of Technology, the University of Nebraska, North Carolina State College, Syracuse University and Rutgers University. To aid the privately-financed schools in defraying the administrative costs of the scholarships, the company has made additional contributions directly to these schools. Recipients of the scholarships are under no obligation to National Starch.

#### Debenture Bonds Issued By Texize Chemicals Inc.

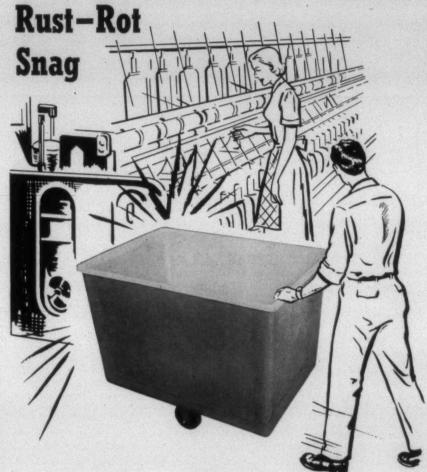
Texize Chemicals Inc. of Greenville, S. C., a producer of sizing products for the textile industry and a variety of other industrial and home products, has announced an issue of \$742,800 in debenture bonds. The bonds bear 5% interest and carry conversion privileges for exchange to Class B non-voting common stock. Proceeds of the issue will be used for new and enlarged manufacturing facilities in Greenville, for additional operating capital and for expansion into new markets. Texize was organized by W. J. Greer in 1945 to manufacture sizing products for the textile industry. Other lines have subsequently been added. Mr. Greer is president and treasurer of the company; W. H. Kline Jr. and E. H. Kittredge Jr. are vice-presidents; James L. Love is secretary; and Dr. Roland Z. Farkas is assistant secretary.

#### Olney Paint's Greensboro Warehouse In New Location

Olney Paint Co. of Spartanburg, S. C., and Greensboro, N. C., has announced that it has moved its Greensboro warehouse to a new location at 1055 Battleground Ave.

#### Metro-Atlantic Innovates Insured Water-Repellents

Metro-Atlantic Inc. manufacturer of textile chemicals, has announced that the performance of its durable water-repellent series -Ranedare-S, Ranedare-R and Ranedare-C-is now actually insured by one of the world's largest insurance companies. Joseph Buonanno, president of Metro-Atlantic, said he believed this impressive guarantee to be absolutely unique in the water-repellent field. Already, he pointed out, the Ranedare Beetle-lite\* Fiberglas Trucks Will Not Dent-Crack-Scratch



None of the usual . . . or the unusual . . .

mill hazards will impair the looks or the efficiency of a Beetle-lite Fiberglas Truck. Strong continuous top and bottom steel reinforcements, completely enclosed heavy seamless molded Fiberglas body, make it practically indestructible. Color is molded in, thus eliminating the need for painting. Satin-smooth finish will not scratch and hence cannot snag. Beetle-lite is impervious to all dyes and chemicals used in mills.

Beetle-lite Trucks will save you money in any part of your mill. Made in 9 sizes, with or without drain bottoms. Write for full information today.

\*Beetle-lite is the exclusive property of the Beetle Boat Co. and Beetle-lite trucks, doff and tote boxes, vats, crocks and tubs are sold exclusively to the textile trade in the United States and Canada by W. D. Dodenhoff Co., Inc.



v. d. dodenko:

GREENVILLE, SOUTH CAROLINA



FISHER MFG. CO. of Hartwell, Ga., builder of functional textile trucks and materials handling equipment, announces completion of construction of its new plant, replacing the original structures which were destroyed by fire when lightning struck in 1954. The entire operation is now under one roof, according to J. Glenn Fisher, president, and has twice the working area of the former plant, which had three buildings. This enables a more efficient operation, and much larger production than before, said Mr. Fisher.

1956 is Fisher's tenth year of service to the textile industry. From its beginning the firm has applied engineering research to the problems of materials handling in mills. Among recent Fisher developments are units with practical floating bottoms, warp beam trucks, roving creeling systems, and trucks to handle large package doffing.



NEW GEIGY FACILITIES AT CHATTANOOGA, TENN.—Increased activity by the Geigy Dyestuffs Division of Geigy Chemical Corp. made necessary new offices, laboratories and warehouse at Chattanooga, which will be under the direction of E. V. Helms. Previously the entire Southern territory was serviced from the Geigy office at Charlotte, N. C.



STEIN, HALL & CO. INC. late this year will move into this \$250,000 manufacturing plant, office building and laboratory now under construction at Glenwood Drive and Fairground Avenue, Charlotte, N. C. The new facilities are designed to meet a growing demand for the company's textile and adhesive products in the South and will replace the firm's present Charlotte operation at 1620-22 West Morehead Street.

The new plant will manufacture all of the products currently being made by the company in Charlotte. These consist of resins for a number of industrial applications and a variety of formulations for warp sizing, printing, finishing and other steps in textile production. In addition, it will turn out Stein Hall's complete line of liquid adhesives for the packaging and other industries, making the company the first major adhesive producer in the state of North Carolina. The expanded facilities also will make it possible to add other company products as demand for them in the South increases and as new developments evolve from the research laboratories.

In addition to increased manufacturing space the new structure will provide the company with modern office space to house its Charlotte sales branch. It will also contain laboratories to facilitate increased emphasis on research and development work for a wide variety of resins and other products and to make possible broadened technical service to customers, particularly in regard to starch products.

#### SERVING THE TEXTILE INDUSTRY-

Guaranteed-Protection Plan has aroused considerable enthusiasm in the trade. The "insurance policy" offered is in the form of an effective hang tag to be affixed to every garment treated with Ranedare. The tag will be backed by "return-free" merchandising program, as well as large-scale trade and consumer advertising.

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#### McLean Trucking Forms Single Textile Division

McLean Trucking Co. of Winston-Salem, N. C., has merged its cotton and rayon divisions into a single textile division. According to John T. Barnes, vice-president, the merger is expected to result in more efficient handling of all textile transportation services, regardless of the type of goods involved. Headquarters for the textile division are located in the firm's New York City terminal building. Other textile division offices are also maintained at McLean terminals in Baltimore, Boston and Philadelphia. Mc-Lean operates in 12 states along the Eastern Seaboard, as well as in the District of Columbia, and also manages and operates Carolina Motor Express Lines Inc. connecting the Midwest with the Southeast.

#### Olin Mathieson Announces Large Expansion Program

A \$7,500,000 expansion program to double electrolytic production of chlorine and caustic soda at the McIntosh, Ala., plant of Olin Mathieson Chemical Corp. has been announced. The expansion will increase the plant's capacity to 250 tons of chlorine and 280 tons of caustic soda per day. Construction, which is already under way, is being handled by the Blaw-Knox Co., with completion scheduled for January 1957.

#### American Lava To Handle Lamicoid Sales & Service

The technical staff of the Titania Division of American Lava Corp. announces a new service—assistance to the textile industry. in the selection and proper utilization of Lamicoid products. Lamicoid, the tradename for laminated plastics manufactured by Mica Insulator Co., Schnectady, N. Y., is made up of specially-selected papers and cloths of all types, impregnated with synthetic resins and molded under heat and pressure into machinable tubes, rods and sheets. The material is also available in gear stock and gear blank form. Wide-spread interest has been shown in the material for such applications as bobbins, spools, lap rolls, pirn and spool caps, picking fingers, redraw caps, sliver rolls, etc. American Lava will handle Lamicoid sales and service in all areas of the U. S. except the far West.

#### Clinton Foods Announces Change In Company Name

A change in the name and ownership of Clinton Foods Inc. has been announced by H. A. Bendixen, vice-president and general sales manager. With the company's recent purchase by Standard Brands Inc., the Clinton (Ia.) Co. becomes the Clinton Corn Processing Co., a division of Standard Brands Inc. The same management will be in charge and Clinton personnel will continue making present contacts. No changes are contemplated in the existing brokerage set up for Clinton products. With the change in name and ownership, the combined resources, experience, sales and service organizations of both Standard Brands and Clinton will be devoted to providing products and service for the company's customers. Other than this, there will be no change in the company's operations.

#### Celanese Awards Contract For Laboratory Construction

Celanese Corp. of America has confirmed the awarding of a general contract for the construction of a dyeing and finishing laboratory in Charlotte, N. C. Construction on a process laboratory at the same site was begun in February. The facilities will be a part of the Charlotte Development Laboratories, the new Celanese development center. The dyeing and finishing laboratory will contain 45,000 sq. ft. It will include a dye laboratory, a finishing laboratory, and a dyeing and finishing pilot plant which will be equipped with full-scale commercial equipment for the handling of woven, knitted and non-woven fabrics. The laboratory will be fully staffed, and will be under the direction of Fred Fortess, manager, dyeing and finishing development, who was previously section head of dyeing and finishing research at Celanese Summit (N. J.) Research Laboratories. The dyeing and finishing operation is part of a co-ordinated applications and product development program which is under the direction of Dr. R. G. Stoll

#### Warner & Swasey Co. Moves Into New Charlotte Office

The Warner & Swasey Co. announces that its Charlotte, N. C., office has been moved to 624 Pecan Ave., P. O. Box 10374. The telephone number there is FRanklin 6-6755. Herman K. Jennings is district manager for the company in the Charlotte office.

#### New Chemical Firm Formed In Charlotte

A new firm to deal in textile chemicals has been formed in Charlotte, N. C., by Robert L. Crowell, formerly a partner in Chemical Processing Co. The firm, to be known as Robert L. Crowell Co., will specialize in warp sizing. Offices have been established at 3104½ Old Pineville Rd.

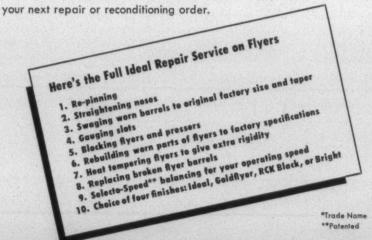
#### American Viscose Plans To Double Research Area

American Viscose Corp. has announced plans to double its research and development quarters at Marcus Hook, Pa. The division, which now occupies 2 floors of a 5-story structure, will take over the whole building except for the space used by the jet and glass departments. The corporation's



combines the time-proven rust-resistant qualities of RCK Black and the smooth-as-glass Ideal Goldflyer Finish which practically eliminates the slubs and doublings caused by tagging-up in noses, eyes, and slots, and choking-up of hollow legs. The Ideal Finish is the most serviceable finish ever offered to textile mills.

Ideal Finish can be applied to new flyers or as part of Ideal's matchless Flyer Repair Service. Send us a half-dozen flyers for a test in your mill, or specify Ideal Finish on



Ideal Machine Shops, Inc., Bessemer City, N. C.

Continuous Service to Textile Mills Since 1925



# What it means to executive policy . . .

In today's intensively competitive market, the executive mind must more than ever be free for all-important marketing and policy decisions. Right decisions are essential for economic survival. Uster testing equipment installed in individual plants directly reduces production problems. Costly delays are avoided by decentralization of testing, and, at the same time, modern statistical control is maintained over the entire mill operation. Continuous quality control means more satisfied customers, lower production costs, higher profits for stockholders. Today, when many yarn buyers are themselves using the Uster testing equipment, it is important that quality control be appraised by the same standards as those used by the purchaser.

# What it means to the superintendent . . .

Progressive mills find individual installations of Uster testing equipment substantially reduce production costs, while allowing for increased production. Continuous quality control raises quality standards, resulting in increased customer satisfaction. Immediate location of defective machinery eliminates costly re-runs and wasteful seconds. The superintendent has an exact and complete picture of production in every department at his fingertips. Major savings are possible. Several mills have eliminated from one to three processes through drawing and roving while maintaining their quality standard. Only continuous quality control, possible only with individual plant installations, can give all these benefits.









CONTINUOUS QUALITY CONTROLIN



# What it means to the overseer . . .

Continuous quality control through individual installations of Uster testing equipment dramatically improves departmental efficiency in production. Uster pinpoints trouble as it happens—the same test that shows up a defect also shows where that defect is. Maintenance problems are proportionately reduced. Correcting specific troubles instead of overhauling entire machines means less down time. Of course, more time for production means increased production. Continuous quality control provides the means for continuous quality production. An overseer with Uster to help him with production problems meets production goals without anxiety. Continuous quality control can be carried on by personnel presently employed-without an additional work load.

# What it means in dollars and cents!

Individual installations of Uster testing equipment assures more profits. The savings in maintenance alone obviously makes the installation worth while. Production losses are eliminated. The margin of operation is widened. The sales force benefits from Uster, because the price of the finished product can be highly competitive. And each sale wins added confidence from customers because of the consistently high quality possible only through continuous quality control. More and more progressive mill operators are finding it profitable to install Uster in each of their plants. Continuous quality control assures maximum efficiency from every dollar invested in textile machinery.



USTER CORPORATION
2516 Wilkinson Blvd., Charlotte, N. C.

United States Sales Offices: Atlanta, Georgia Needham Heights, Massachusetts Canadian Sales Office:

Anadian Sales Office:
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C.Q.C.

Write for textile classic: How One Mill Traces Bad Work Uster Corporation, Charlotte, N. C.





N MANUFACTURING



#### **OUR SPECIALTY!**

Our specialty is making Dary ring travelers—an item well and favorably known to the textile trade for more than half a century. Though times change, we at Dary hold to one course without deviation. We continue to serve, by pursuing our specialty.

When you need ring travelers, call on our experience to aid your choice. Consult your friendly Dary representative!

Always specify

DARY Ring Travelers



#### SERVING THE TEXTILE INDUSTRY-

textile research department also occupies a separate building at the Marcus Hook location. The research and development staff has nearly tripled in the past few years and some of the larger sections are widely scattered. With enlarged facilities, each section will be able to work more closely as a unit. The project is expected to be completed by the end of next year.

#### Solvay To Expand New Caustic-Soda Plant

The Solvay Process Division of Allied Chemical & Dye Corp. has announced plans for expansion of its mercury cell chlorine-caustic soda plant, now under construction at Brunswick, Ga. Carlton Bates, Solvay's president, reports that capacity of the plant will be doubled. Construction of the initial facilities is expected to be completed late this year. The company hopes to have the second step ready for operation in the Fall of 1957. Solvay's plant site at Brunswick consists of some 700 acres located on the Turtle River.

#### Dalnoca Dye Works Inc. Opens At Dallas, N. C.

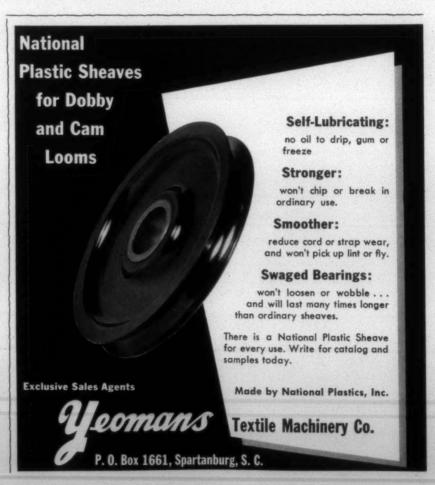
Dalnoca Dye Works Inc. of Dallas, N. C., has applied for a North Carolina charter of incorporation. Jerry W. Walker, president, said the corporation would occupy the former Dallas Mills building, with about 4,000 sq. ft. of space. Initial production of 10,000 lbs. of piece goods weekly is expected. Other officers of the corporation include Harry H. Sweetbaum, vice-president; Mrs. Viola P. Johnson, secretary; and D. E. Walker, treasurer. The corporation has authorized capital stock of \$100,000. Messrs. Walker and Sweetbaum are also directors and stockholders of Dalnit Inc., a new plant being opened in Dallas to produce women's Orlon sweaters.

#### N. Y. & N. J. Lubricant Marks 60th Anniversary

New York & New Jersey Lubricant Co. last month celebrated its 60th anniversary in the industrial lubrication field. On April 21, 1896, Thomas A. Matthews introduced a new concept in lubrication when Non-Fluid Oil was first placed on the market. At the time other lubricant manufacturers already in the field were openly skeptical as to the future of this new product for which such broad claims were made. Since that time, however, Non-Fluid Oil and the New York & New Jersey Lubricant Co. have become known to manufacturers throughout the world.

#### Yale & Towne Names Virginia Sales Agent

The Yale & Towne Mfg. Co. has announced the establishment of the state of Virginia as a separate sales and service



territory in order to better serve the lift truck market in that area. The S. L. Cooper Co., materials handling specialists with offices in Washington, D. C., Radford and Richmond, Va., has been named Yale sales and service representative for the new territory. The company maintains its head offices at 1700 Eye St. N.W., Washington. Its main sales and service facilities are temporarily located in Richmond at 5402 Lakeside Ave. A move to more spacious quarters is planned for this Summer to facilitate more efficient customer service handling.

#### Morton Salt Co. Opens New Research Building

A new, multi-million dollar laboratory building designed especially to facilitate research projects related to salt and its usage now is in operation at Woodstock, Ill., a short distance northwest of Chicago. The Morton Salt Co., which built the 67-room structure on a 22-acre site, states that the laboratory will provide it with the best available facilities for operation of its research and development department. Thirty-seven rooms in the building are individual laboratories, each fully equipped within itself. A hand-picked staff of top chemists and chemical engineers is assigned to the new facility.

#### New Firm To Offer Sanitized Process

A new company—Sanitized Sales Co. of America Inc.—has been organized to license users of the Sanitized process. Developed by the Sanitized Corp., the process retards the growth and action of bacteria in fabrics and prevents the development of perspiration odors, mold and mildew. It does not affect in any way the color, feel or texture of the fabric. The new sales company is a joint venture by N. Erlanger Blumgart Inc. and Dubin-Haskell-Jacobson Inc., and will act under an exclusive arrangement with the Sanitized Corp.

### Hyster Co. To Build New Plant In Danville, III.

The Hyster Co., manufacturer of industrial lift trucks and tractor equipment, has announced it will construct a new plant in Danville, Ill. Ground-breaking for the first unit will begin as soon as possible. On completion, the new plant will be comprised of several additional factory units. Plans call for production to continue both at the present Danville plant and in the new facilities. The Danville plant was established 10 years ago.

#### Wheeler Reflector Co. Celebrates 75th Year

Wheeler Reflector Co. of Boston, Mass., is currently celebrating its 75th anniversary with the theme "lighting the way to brighter tomorrows." The company is one of America's leading manufacturers of fluorescent and incandescent lighting equipment.



Cut Costs by Modernizing Their Drafting

J. P. Stevens has recently equipped over 300 frames with Dixon Saddle Guides. The installation was based on reduced operating costs, improved yarn quality, low first cost, and easy installation.

Dixon Saddle Guides entirely eliminate oiling and yarn wrapping and greatly reduce cleaning, yarn soiling, picking, and other spoilage. These savings and advantages, plus a great reduction in drafting power consumption, make Dixon Saddles pay for themselves quickly — frequently in under two years.

First cost is remarkable — as low as \$1.20 per spindle. Installation is simple, easy, and low in cost. Already proved on over 300,000 spindles. Write immediately for further information.

#### DIXON CORPORATION

BRISTOL

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Southern Sales: R. E. L. Holt, Jr., and Associates Inc., Box 1319, Greensboro, N. C. Northern Sales: William R. Fox, P. O. Box 380, Providence, R. I.



Acid Tanks

Ball Bearing Journal Assemblies for Slashers and Dry Cans

Bleaching Tanks and Tubs

Card Screens Repaired, New

Card Screen Bars and Ribs

Card Screen Lickerins for Cotton and Rayon

Chemical Tanks

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Cylinders Spinning Spooling Twisting

Drip Pans

Dye Kettles and Vats (New)

Dry Cans New and Repairs

Driers

Filters

Misc. Sheet Metal Work

Picker Screens
Perforated Metal
English Wire Cloth
Galvanized Wire

Pneumatic Conveying Systems

Quill Cans

Rolls of All Types

Size Kettles

Tanks

Vee Belt Drives for Dry Cans

Waste Screens

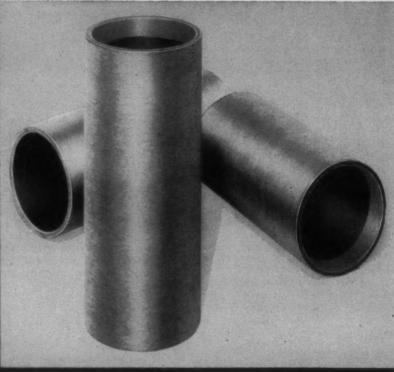
Special Machines Custom Built

SPARTANBURG,

SOUTH CAROLINA, U.S.A.

# New...from Sonoco!





Now from SONOCO—new D-3 Duroweld Lap Rolls that offer a number of distinct advantages!

Because of their exceptionally long life, SONOCO Duroweld Lap Rolls are more economical—weigh less than steel tubing—and run cooler, too. These lap rolls can be easily reworked to remove nicks, and even after long service they do not develop sharp edges or fray on the ends.

SONOCO Duroweld Lap Rolls are chamfered inside at the ends to comply with Saco-Lowell Drawing No. 3DL331. Available in standard 9" and 101/2" lengths with 41/2" O. D.

For further information, consult your SONOCO sales-engineer, or write us direct.



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# SONOCO PRODUCTS COMPANY

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DEPENDABLE SOURCE OF SUPPLY

# textile bulletin

Editor	. JAMES MCADEN JR.
Associate Editor	JACK KISSIAH
Assistant Editor	Andrew Hewitt
Inquiry & Reader Service	. EMILY G. KERNS

TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving phases of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are theirs and not necessarily those of the editors and publishers. ¶ Circulation rates are: one year payable in advance, \$1.50; three years payable in advance, \$3.00;

#### CLARK PUBLISHING COMPARY

P. O. Box 1225 • CHARLOTTE 1, N. C. • Telephone ED 3-3173 — Offices and Plant: 218 West Morehead Street, Charlotte 6 —

one year, Canada, \$3.00; one year, other countries in Postal Union, \$5.00; single copies, 25 cents. ¶ A companion monthly journal, THE KNITTER, is published by Clark Publishing Co. and devoted to the interests of the knitgoods manufacturing industry.

MEMBER: Audit Bureau of Circulations and National Business Publications Inc.

#### Sheer Baloney, But Fruitful

We've drycleaned an old story somewhat for the public print, but it went something like this: The barroom braggart was waxing about his success with the ladies, saying that in his opinion there were mighty few women who weren't flattered by his approach. He was asked to specify his method. The answer: "Well, when I see a pretty girl I just go up and kiss her on the back of the neck. I'll have to admit that I get the hell slapped out of me sometimes, but you'd be surprised how often I subsequently get a real smooch."

Fellow in the knitting business by name of Willie de Mond didn't have much luck when he used that type of approach in promoting his wares recently. But he did get a lot of publicity. Willie, who goes by the monniker, "Willys of Hollywood," actually has his hosiery plant in Los Angeles. But we don't object to such poetic license since it seems to be standard California procedure. Still, Willie does a big business in the movie-making industry by furnishing fabulous hosiery, leotards and other garments to film players [we had always thought a leotard was something obscene until our daughter began taking ballet dancing and looking dreamingly off into the distance].

We have kept an eye on Willie, with some curiosity, for some years now, since he first appeared as Willie Desmond. The Hollywood atmosphere allowed the last name to become de Mond, or DeMond, according to the whimsy of press association editors.

All in all, though, Willie does a bang-up job with his bejeweled stockings. They are supposed to retail, believe it or not, for \$150 to \$650 a pair—repeat pair—depending on whether they are decorated with pearls or diamonds. Also, Willie gets further publicity each year by nominating and naming "Hollywood's ten best legs;" we forget whether this venture encompasses women, men, in-betweens, five people or ten, but it doesn't really matter.

Six or seven weeks ago Willie was in Detroit picking up a new car, a Continental presumably, and announced that (a) Margaret Truman would wear a pair of his \$650 flimsies at her wedding; and (b) a pair of the pearl-trimmed variety had been sent to Grace Kelly, another bride-to-be of the headlines. One of Miss Margaret's friends punned a retort that the whole business was "sheer nonsense." Miss Truman, who fortunately has never been as loquacious as her daddy, merely said that she wouldn't accept the stockings "as a gift," whatever that meant. Miss Kelly, who never did get checked out as to the way things are done in Hollywood, also failed to co-operate with Willie; she just said that she hadn't received hers.

Summing it up, the two gals maintained a proper degree of good taste, and Willie got figuratively slapped. But look at the free agate lines he got in newspapers throughout the country. And maybe a few women who read about it might have been prompted to think that *they* needed a couple of pair of nice hose—"and since you haven't got any of those with rhinestones on them, just give me some real sheer ones."

We had thought that someone in our own end of the textile industry might have pulled a "Willie" stunt by offering to send Miss Grace some household linen. Col. Elliott Springs could have made a good thing of a sheet gift, but probably he was invited to the Kelly-Ranier reception only; any good Southerner knows that there is no obligation to send a wedding present if you aren't asked to the church.

The Colonel, by the way, doesn't do badly with his extraordinary approach to textile merchandising. He reports a profit of almost 9½ million dollars on net sales of approximately \$138,000,000 during 1955. This, roughly figuring, is a ratio of 1 to 14, considerably better than shown by the other textile firms, large or small.

At the recent American Cotton Manufacturers Institute

convention Frank Leslie, a featured speaker and by no means a dull merchandiser himself, had this to say: "Nor do we, as an industry, lack the imaginative talents to implement . . . promotion. In one of the most original advertising campaigns, Mr. Elliott Springs—by implications which were more often effective than subtle—brought into the American home the wholesome message that there were supplementary or corollary uses for bed sheets other than the obvious one of sleeping on them. While he was subjected to some criticism from those who apparently objected to the spreading of decadent Yankee customs, nevertheless, his efforts merit our highest approval. For one thing, it was probably the first promotion in advertising history which encouraged the creation of new uses and the procreation of new customers at the same time."

You get slapped by a few irate letters from clubwomen, but you'd be surprised at how the sheets sell.

#### The Need For A Realistic Cotton Policy

On the basis of present trends, cotton production in the United States by 1965 should be 12.5 per cent higher, with the same acreage allotment as in 1955, and during the same decade, total domestic consumption will decline by 2.5 per cent, and exports, continuing to fall, would be one-fourth less.

Such is the prospect for cotton projected in a report or summary of a comprehensive analysis of U. S. agricultural trends by Professors John D. Black of Harvard University and James T. Bonnen of Michigan State College, and issued by the agriculture committee of the National Planning Association.

The authors describe their study, however, not as an outlook report, but a description of economic factors at work in agriculture and such factors are merely projected during the next decade as benchmarks for private and public planning.

The study examines production and consumption of farm products in terms of a goal of bringing the output of farm products of this country into balance with the demand for these products in ten years, by 1965. "Balance" is defined as "an agriculture that would stand on its own feet without subsidies and controls" except in times of crop failure, economic depression or large wartime demands. The authors emphasize that consumption cannot be expected to catch up automatically with production because the use of modern methods and machinery tends to increase farm output at a faster rate than the growth of population.

The over-all conclusion of the authors of the report is that the surplus of farm products can be expected to more than double by 1965 if present production and consumption trends continue. They estimate on the basis of these trends an 8.8 per cent surplus of farm products a decade from now, compared to the 1955 excess of about four per cent. They make a continuation of the present general program of price supports and production controls one of their basic assumptions.

As for cotton, Profs. Black and Bonnen say that to achieve a production-consumption balance, the harvested acreage

#### TEXTILE INDUSTRY SCHEDULE

**— 1956 —** 

May 31-June 2 (Th-Sa)—SQUTH CAROLINA TEXTILE MFRS. ASSN., The Cloister, Sea Island, Ga.

June 5-8 (Tu-F)—MATERIALS HANDLING INSTITUTE EXPOSITION, Cleveland (Ohio) Public Auditorium.

June 8-9 (F-Sa)—Annual outing. SOUTHEASTERN SEC., A.A.T.C.C., Radium Springs, Albany, Ga.

June 8-9 (F-Sa)—COTTON BUYERS & CLASSERS DIV., N.C.T.M.A., Grove Park Inn, Asheville, N. C.

June 8-9 (F-Sa)—Annual outing, PIEDMONT SEC., A.A.T.C.C., Mayview Manor, Blowing Rock, N. C.

Lune, 15-16 (F-Sa)—CARGLINAS VIRGINIA PURCHASING AGENTS

June 15-16 (F-Sa)—CAROLINAS-VIRGINIA PURCHASING AGENTS ASSN., Grove Park Inn, Asheville, N. C.

June 17-22 (Su-F)—Annual meeting (in conjunction with apparatus exhibit), A.S.T.M., Chalfonte-Haddon Hall, Atlantic City, N. J.

June 21-23 (Th-Sa)—Annual convention, SOUTHERN TEXTILE ASSN.,
Mayview Manor and Green Park Hotel, Blowing Rock, N. C.

June 22-23 (F-Sa)—Annual outing, SOUTH CENTRAL SEC., A.A.T.C.C., Lookout Mountain Hotel, Chattanooga, Tenn.

Sept. 6-7 (Th-F)—Fall meeting, THE FIBER SOCIETY, Warwick Hotel, New York City.

Sept. 10-15 (M-Sa)—PERKIN CENTENNIAL (sponsored by various professional societies and trade associations), Waldorf-Astoria Hotel, New York City.

Sept. 13-15 (Th-Sa)—National convention, A.A.T.C.C., Waldorf-Astoria Hotel, New York City.

Sept. 20-21 (Th-F)—Annual outing, CHATTANOOGA YARN ASSN., Lookout Mountain Hotel, Chattanooga, Tenn.

Sept. 27-28 (Th-F)—Annual meeting, COMBED YARN SPINNERS ASSN., Cavaller Hotel, Virginia Beach, Va.

Oct. 1-5 (M-F)-19th SOUTHERN TEXTILE EXPOSITION, Textile Hall, Greenville, S. C.

Oct. 6 (Sa)—Annual meeting, PIEDMONT SEC., A.A.T.C.C., Charlotte (N. C.) Hotel.

Oct. 11-12 (Th-F)—Annual meeting, NORTH CAROLINA TEXTILE MFRS. ASSN., The Carolina, Pinehurst, N. C.

Oct. 13 (Sa)—TEXTILE OPERATING EXECUTIVES OF GEORGIA, Hightower Textile Building, Georgia Institute of Technology, Atlanta.

Oct. 16-19 (Tu-F)—COMMITTEE D-13 ON TEXTILES, AMERICAN SO-CIETY FOR TESTING MATERIALS, Warwick Hotel, New York City. \*Oct. 22-26 (M-F)—NATIONAL SAFETY CONGRESS AND EXPOSITION (sponsored by National Safety Council), Chicago, Ill.

(sponsored by National Safety Council), Chicago, Ill.
Oct. 24-25 (Th-F)—Annual meeting, CARDED YARN ASSN., Hotel Fort
Sumter, Charleston, S. C.

\*Nov. 1-2 (Th-F)—PERSONNEL DIV., S. C. TEXTILE MFRS. ASSN., Ocean Forest Hotel, Myrtie Beach, S. C.

Nov. 27-30 (Tu-F)—NATIONAL CHEMICAL EXPOSITION (under auspices of American Chemical Society), Cleveland (Ohio) Public Auditorium.

Dec. 1 (Sa)—SOUTH CENTRAL SEC., A.A.T.C.C., Hotel Patten, Chattanooga, Tenn.

Dec. 4-5 (Tu-W)—Conference, COATED FABRICS DIV., SOCIETY OF THE PLASTICS INDUSTRY, Hotel Commodore, New York City.

Dec. 8 (Sa)—SOUTHEASTERN SEC., A.A.T.C.C., Atlanta, Ga.

- 1957 -

Jan. 28-29 (M-Tu)—Annual meeting, NATIONAL COTTON COUNCIL OF AMERICA, St. Louis, Mo.

Apr. 4-6 (Th-Sa)—Annual convention, AMERICAN COTTON MFRS. IN-STITUTE, Palm Beach Blitmore Hotel, Palm Beach, Fla.

\*Apr. 9-11 (Tu-Th)—NATIONAL PACKAGING CONFERENCE AND EX-POSITION (sponsored by American Management Assn.), International Amphitheatre, Chicago, Ill.

\*May 1-2 (W-Th)—Spring meeting, THE FIBER SOCIETY, Clemson House, Clemson, S. C.

†Fall—National convention, AMERICAN ASSN. OF TEXTILE CHEMISTS & COLORISTS, Boston, Mass.

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday; (Su) Sunday

\*Listed for the first time this month.

‡Tentative listing.

†Changed or corrected from previous issue.

would have to be reduced to 13 million from the 16.9 million in 1955. They proceed to amplify their conclusion with these statistics:

Given the level of cotton prices that have been maintained in the past few years and no production controls, cotton production would increase by more than a half by 1965. Yields per acre would increase a half above the record yield of this past season. Acreage and marketing quotas have been imposed in 1950, 1954 and 1955.

With the same acreage allotment in 1965 as in 1955—18.1 million—cotton output would increase 12.5 per cent because of the expected further increase in yield. Per-capita consumption is expected to decline from 26 pounds in 1955 to 22 pounds in 1965.

This will mean a decline in total domestic consumption of 2.5 per cent. Exports are expected to continue their downward trend as a result of expanding output in other countries—to fall from four million bales in 1955 to three million in 1965. This year's carry-over is 11 million bales.

To bring production into balance with domestic plus export demand, if the foregoing projections are accepted, will call for a harvested acreage of around 13 million in 1965, down from 16.9 million in 1955.

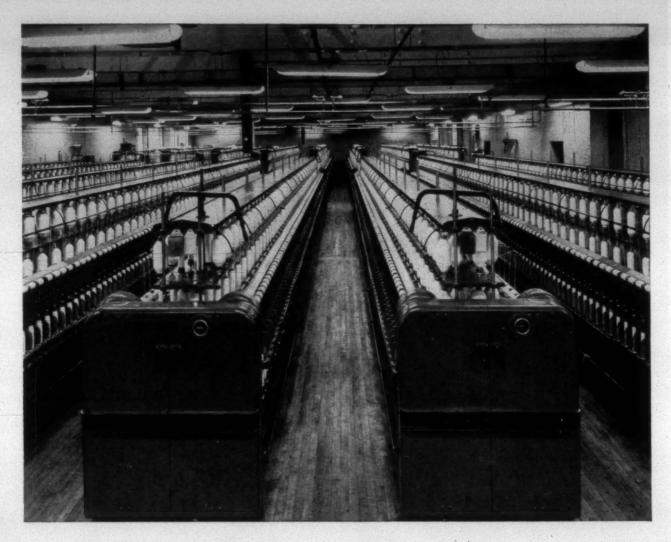
What seems most likely to expect is an effective acreage cut less

severe than this, yields increasing faster than projected, and prices down around 28 cents per pound with 32 cents in 1954-55. With no excess stocks on hand, the free-market price would now be around 24 cents.

The authors of the report, entitled "A Balanced United States Agriculture in 1965," point out also that without production controls the farm surplus would amount to a great deal more, and that "holding price supports at high levels works in exactly the opposite direction from that needed." The N.P.A. Agriculture Committee made no policy conclusion or recommendations based on this analytical report, and, in approving it for publication, said that the policy views in the report "are those of the authors."

It is absurd, of course, for the United States to produce more cotton than is required for domestic consumption, exports and a reasonable carryover. It is true also that the number of bales consumed in this country should increase with the increase in population. We don't have the answer, and can only hope that someone will turn up with it.





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# TEXACO Lubricants

FOR THE TEXTILE INDUSTRY

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# textile bulletin

VOL. 82

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NO. 5



A Sthings have finally seemed to turn out, those Japanese boycott laws enacted by the South Carolina and the Alabama legislatures were really much ado about nothing, insofar as they might serve directly to curb sales or the volume of sales of Japanese cotton textile goods in this country. There seems indeed little probability of this movement extending any farther geographically than it has and whatever direct impact they could have would appear insignificant, despite whatever alarm they might have caused in Tokyo and Osaka, resulting in a formal protest to the U. S. State Department.

As anyone might have perceived at the outset, the passage of these boycott laws created some rather adverse and harsh editorial comment in other parts of the country, and some similar comment right here pretty much close at home. And not only the State Department but the Eisenhower Administration could certainly have viewed them with concern, for they are indeed loaded with much potential thunder—and embarrassment—both for Secretary Dulles and the President.

The South Carolina Textile Manufacturers Association on more than one occasion in public statements has made it clear that it had nothing to do either with the introduction or passage of the South Carolina law and that its attitude had been one of neutrality, or hands-off. In the final analysis, however, the one important consequence or benefit of such dubious legislation has been entirely indirect yet has reacted greatly to the cause for which the cotton textile manufacturers, supported by other segments of the raw cotton industry, have been fighting for so long and so valiantly and against odds which in the beginning seemed indeed to be virtually insurmountable.

By kicking up a furore as they did, from one end of the

country to the other, the anti-Japanese boycott laws also tended to bring into sharper national focus the serious plight of the industry in the face of the trend of the country's foreign economic policy. This policy has opened wide the gates of the U. S. home market for cotton goods to the Japanese, one which the textile industry has ample justification to believe is committed to a conviction that the U. S. cotton and textile economics are expendable on the altar of "free trade."

The problem can't, obviously, be altered very much by requiring the stores that do sell Japanese textiles to display signs or placards informing their customers that they do. But by acquainting other parts of the country—not particularly the textile-manufacturing states themselves, where the situation is pretty well known—with the really precarious condition in which the industry finds itself in respect to the growing menace of Oriental imports and the long range outlook, enough repercussion may be heard in Washington sufficient to bring about what the industry itself has long since recognized to be the only reasonable solution—an equitable and global system of import quotas, imposed by the United States Government itself either through administrative or Congressional action.

This is no easy job, to be fully attained in a day or a night, or even in the course of years, but it would seem to be the only way—that is, getting its side of the story before the court of national opinion, rather than the court of regional opinion represented by the textile communities themselves. It has taken a good many years of painstaking effort even to remove the national image of textiles as a backward, sweatshop industry which undeniably it was popularly conceived to be just a decade or two ago.

So these boycott laws accomplished, even in a left-handed way, a desired end-result, even though it begins to appear more and more that there is not going to be any very serious effort to enforce them. Who is going to insist that they shall be enforced, if the textile industry had no part in asking for such legislation? Indeed, there are few textile manufacturers or industry spokesmen who would not readily concede that such laws, even if on a larger geographical scale, couldn't very well help directly to ameliorate the precarious situation and gloomy outlook faced by the industry and which can be altered in no foreseeable way short of the establishment of an equitable import quota system such as has been advocated by A.C.M.I.

Actually, other than tending to impinge the seriousness of the textile industry's predicament upon the nation's

Are the South Carolina and Alabama Japanese boycott laws a tempest in the teapot or a full-blown tempest? Either way they have called the nation's attention to the plight of textile states in general and these two states in particular.

consciousness, the major consequences of the boycott laws have been to cause a new discordant note in U. S.-Japanese relations, general criticism for the use of the economic weapon of boycott for the purpose intended, and to present to the merchants of some textile communities a chance to make a fanfare of their not carrying Japanese-made goods and to do perhaps a bit of smart merchandising. Even this last-mentioned spontaneous movement, however, is more than likely to fizzle of its own lack of propulsion once the novelty has worn thin.

After passing, without much ado, the original anti-Japanese boycott act, the South Carolina legislature adopted a resolution calling on a number of other states to do likewise. So far Alabama has been the only state to do so. An attempt to get such a law in Mississippi, where textile manufacturing doesn't constitute so large a part of the

economy, fell flat.

In scattered cities and towns the boycott laws have, of course, sparked some spontaneous discrimination against Japanese textile goods by retailers. Some chain stores, rather than either run afoul of the new law or comply with it, are reported to have shipped their inventories of Japanese blouses out of the state or otherwise discontinued their sale. The latter action may have been premature, however, since it has become increasingly apparent no one may take the initiative in enforcing the new laws, which a great weight of legal authority seems to believe cannot run the gamut of a challenge in the federal courts anyway.

There has been no indication either, as yet, of any total or widespread willing compliance, outside of some preponderantly textile communities which presumably would be of a somewhat voluntary nature. Most of the chains, larger retailers and wholesalers, have been candid in expressing their dislike. The executive secretary of the South Carolina Chain Store Council calls the new law "inept and unvisionary." In the rather confused situation, the South Carolina Chamber of Commerce has recommended compliance on the part of its members only if, after consultation with their local authorities, it is ascertained that these officials intend to enforce the new law.



And it is reported that in Alabama—where, incidentally, penalty for violation of the state law is only \$25, rather than the \$100 in South Carolina—there have been instances of a few stores lettering the "Japanese Textiles Sold Here" signs in Japanese script. State Attorney General T. C. Callison of South Carolina has been publicly and generally quoted as expressing grave doubt there will be attempted enforcement.

### The Ramifications Are Unending

The boycott laws have quite naturally made Tokyo and Osaka unhappy and the Japanese have formally protested to the U. S. State Department. Secretary of State Dulles has expressed great concern, pointing out that such things are prohibited by U. S. trade treaties, including the one with Japan. Yet about all that it can do, the State Department

concedes, is wait until somebody should bring a legal action to test the constitutionality of such laws. And this, obviously, could be a matter of concern to the Eisenhower Administration since, if the federal courts should throw out such laws, one more ignition of the states rights issue could enlist new support for such measures as the Bricker Amendment to limit presidential treaty-making powers, and have bearing on many other issues as well.

In some towns of upper South Carolina whose entire economies are dependent on the mills, a number of merchants have used the new law somewhat in reverse and made a great to-do, through advertisements, public statements and window displays, that they do not sell Japanese-made textiles and don't intend to. This sort of thing has spilled over considerably into mill towns and cities of Piedmont North Carolina—and North Carolina, of course, doesn't even have a boycott law, at least as yet.

The motivations behind these spontaneous local boycotts may include an effort to please local mill owners and the mill employees or a competitive desire to embarrass another store down the street. Here and there, nevertheless, a report has occasionally cropped up of a hardware or some other type of merchant eliminating from his stock Japanese-made goods which are not even remotely related to textiles.

The foregoing seems to be about the total or net result of the whole matter, except that it has produced some rather sharp official as well as editorial comment here and yonder. For instance, Secretary Dulles who has been pointing out that such actions by one of the states not only disturb relations with a friendly nation but can boomerang as other nations see fit to retaliate, wrote Gov. George Bell Timmerman of South Carolina and Gov. Jim Folsom of Alabama about some of his grave concerns.

Gov. Timmerman replied that the South Carolina law was "a product of a prevalent belief that the policy pursued by the administration is detrimental to the Southern textile industry." And as to Secretary Dulles' suggestion that a lawsuit might bring the state to terms, Governor Timmerman observed: "It is my opinion that court action against this law would, like the recent opinion of the Supreme Court of the United States in the school segregation cases, defeat its purpose by the public resentment it would engender.

"The wiser course would be, I believe, for the State Department to give assurance which would allay the doubts of South Carolinians. In doing so, the United States Government could realistically enlist the support of South Carolianians in securing appropriate legislative relief."

Tempest in a teapot or full-blown tempest, the South Carolina affair managed to stir up a first-rate fuss, with a lot of people getting an earful, many perhaps for the first time, of the extent to which a basic and vital American industry can virtually be "sold down the river" in pursuit of a foreign economic policy which has some pretty obvious illogical aspects.

Chinese Communists say they have developed the world's largest silkworm. According to Communist newspaper Ta Kung Pao, the "heavyweight champion" weighs more than an ounce and produces durable silk "soft, warm, bright, elastic and crease-resistant." The average silkworm, according to the Encyclopedia Britannica, weighs a little more than two-tenths of an ounce. A new silkworm research institute will be built this year in Canton, the Communists report.

# A New Look At Old Problems

It's always a good idea to talk over your problems. They may be old problems or they may be new. But there's nothing like a good airing to bring them into sharp focus.

INDUSTRY problems, concern with Japanese competition and new approaches to coping with it, education and employee relations featured the major discussions at the 55th annual meeting of the Alabama Cotton Manufacturers

Association in Biloxi, Mississippi, April 11-13.

New president of the association is R. C. (Dick) Moyer, manager of The Linen Thread Co., Blue Mountain. He succeeded Fred F. Phillips, president of Buck Creek Cotton Mills, Siluria, who was named chairman of the board. Other new officers elected were F. M. Lyon, president of Opp-Micolas Cotton Mills, Opp, vice-president, and E. R. Lehmann, vice-president, West Point Manufacturing Co., Lanett, treasurer. Dwight M. Wilhelm, Montgomery, was re-elected executive vice-president, and Mrs. Sara Davenport, Montgomery, was re-elected secretary.

Named new directors were: Wilson Patterson, superintendent, Tallassee Mills, Tallassee; Eugene Gwaltney, director of development, The Russell Mfg. Co., Alexander City,

and G. V. Lund, of Courtaulds Ltd., Mobile.

Deep concern over the increasing Japanese competition and the lowered United States tariff was climaxed at the final session when the association went on record as urging both wholesalers and retailers of the state not to offer Japanese textiles and garments made from cotton for sale.

Emphasizing the threat of such competition to the thousands of textile employees and cotton farmers in Alabama, the association adopted a resolution requesting all wholesale and retail establishments in the state which would normally handle textile fibers, fabrics and garments to "refrain from adding to this type of competition that cannot be met under the American standard of living, that is undermining operations in U. S. textiles and promises to become depressing and disastrous unless checked in time."

The association further urged such establishments to "voluntarily issue statements to the public that they are refraining from offering such textile items as a contribution to the stabilization of employment, both in industry and in agriculture, to the end that we may retain for this important segment of our economy an American standard of wages and living, rather than force upon them an Asiatic 'rice bowl' way of life."

### The President's Address

In his annual address, President Phillips praised highly the Southern textile worker but charged that there is a "fifth column" threatening the industry. This "column," he said, is composed of four segments: (1) "Do-gooders" in government; (2) the fear which our people must have in many cases of their own ability to survive; (3) a feeling of inse-

curity which results from a lack of concern for worker welfare; and (4) "Operation Dixie," or the union efforts to organize the industry.

The sound way to overcome these threats and fears, he declared, is to treat the textile employee with "a sense of human dignity" and to place greater stress on human relations in industry. He said the respect of the Southern employee is to be won not by title but by merit.

"Certainly, under no circumstances," he said, "can we afford, or do we want to afford, to forget that our people keep the wheels turning; and unless our relations will afford the defeat of this 'fifth column,' then indeed all is lost."

Dr. Houston Cole, president of Jacksonville State Teachers College, Jacksonville, Ala., told the convention that a lack of trained workers may impede the South's economic progress. But, he added, Northern industry will continue to move Southward and will force this region to produce more skilled technicians. Dixie, he pointed out, has an abundance of labor taken largely from the farms where it is increasingly less needed. It also has plenty of raw materials, good transportation facilities and a "warmth with which the average community receives a new plant."

On the other hand, he continued, there is evidence to justify the statement that the schools and colleges may not be able to meet the growing demand for technically trained people. It is estimated that an average of three jobs awaits

each graduate engineer. He warned:



R. C. Moyer



Dwight Wilhelm



Fred F. Phillips

"It is highly conceivable that the industrialization of the South will be impeded by the lack of trained employees. All of this would justify the contention that the No. 1 problem of the region is education."

Harry Riemer, editor of the Daily News Record, told the meeting that during the next few years the United States textile industry may find it necessary to think along the lines of changing over some types of its production, due to the fact that Japan and other foreign countries are able to deliver in sizable quantity—especially in the popular price range—such things as sheetings, broadcloths, print cloths, drills and velveteens into this country.

There was emphasis at the convention, too, on the furtherance of textile education. Results in the form of more and better trained young people for the industry already are being obtained as a consequence of the organization of the Alabama Textile Education Foundation, M. Earl Heard, foundation president and vice-president in charge of research of the West Point Mfg. Co., said.

Dr. Heard reported that the enrollment at the School of Textile Technology at Alabama Polytechnic Institute has more than tripled in the past three years. A peak of 184 was reached this year. He added that the foundation has provided \$30,700 for the school since its organization three years ago.

E. R. Lehmann, who served during the past year as chairman of the public relations committee, emphasized in his report that one of the best public relations projects undertaken by the association has been the annual Alabama Cotton

Improvement Contest.

Mr. Lehman cited as other important projects undertaken during the past fiscal year the Maid of Cotton Contest, the Man on the Land luncheon in Birmingham, the annual Alabama Textile Safety Contest, and the Birmingham Festival of Arts, which featured as its theme "Land of Cotton."

Executive Vice-President Wilhelm, presenting the report

of the Cotton Contest Committee, said the urgent need for the imposition of textile import limitations was emphasized by the textile speakers at all five of the cotton contest award meetings held over the state in February. This contest is sponsored jointly with the Alabama-Florida Cottonseed Products Association. The two associations jointly contribute \$4,000 in cash awards to winners each year, he pointed out.

The convention paid tribute to several outstanding men who had passed away during the past fiscal year. These included Paul A. Redmond, Sr., chairman of the board of Alabama Mills, Birmingham; David Clark, publisher and chairman of the board of Clark Publishing Co., Charlotte, publisher of Textile Bulletin; Arthur Cook, treasurer of West Boylston Mfg. Co., Montgomery, and Frank G. North, Frank G. North Inc., Atlanta.

Altogether, the convention was considered one of the most successful ever staged by the association, and Mr. Wilhelm and Mrs. Davenport were accorded lavish praise for their efforts in its behalf.

### C. M. A. G.

# Human Relations In The Textile Industry

THE tariff, problems of machinery, materials and distribution, acute as they are, do not overshadow in significance the vital problem of the "human function" in the textile industry.

That was the consensus of top textile executives from throughout Georgia at the 56th annual convention of the Cotton Manufacturers Association of Georgia in Nassau,

the Bahamas, April 25-28.

The convention was designed to be a "working" one, and it was just that-built around the over-all theme of human relations in industry. Keynote speaker was Dr. George D. Heaton, pastor of the Myers Park Baptist Church, Charlotte, N. C., and a recognized authority on human and industrial relations. He delivered the major addresses at both business sessions, using as his general subject, "Human Engineering."

Morris M. Bryan Jr., association president and president of The Jefferson Mills, Jefferson, set the stage for the discussions which were to follow when he declared in his annual address that the survival of the United States textile industry may depend largely upon how well it improves the "creative contributions" of its employees. And how well it does so will depend upon the kind of a job achieved by management "

in its human relations opportunities.

Mr. Bryan summed up the dilemma of the industry neatly when he asserted that it had done nearly everything it was supposed to do under the free enterprise system of which

it was so proud-"except make money."

In the nine-year period between 1945 and 1954, he said, the industry could point to these accomplishments: It had increased its productivity per man-hour. It had passed on an amount double that gained from this increased productivity to its employees in wage benefits. It had invested \$4 billion in new plants and equipment. It had reduced the cost of its merchandise to the public by more than one-third.

Yet, despite all this, the textile executive lamented, the

The importance of the human faction in the textile industry was given special emphasis at last month's meeting of the Cotton Manufacturers Association of Georgia.

industry, in the same period of years, "suffered by a stifling profit margin reduction of eight to one."

Actually, outgoing President Bryan said, profits declined so drastically that in 1954 they represented a net of less than one per cent on sales, after taxes. Yet, during this same nine-year period the industry invested in new plants and equipment an amount equal to nearly \$200 for each active spindle in place.

What is needed first of all to overcome this "fantastic" decline in profits, he continued, is a large expansion of present markets. That can be achieved only "through the creativeness of people in the planning, promotion and merchandising of our product." In this respect, he paid high tribute to the research and promotional work of the National Cotton Council and urged greater support of it by the textile

In addition, he continued, the industry must reduce its costs, particularly in view of the "fierce competition" which exists within its own ranks. He said a cut was needed in the cost of production, of waste that is made as a by-product and of off-quality merchandise. But the greatest need of all is for a reduction in the cost of production per man-hour.

Mr. Bryan cited that for each one per cent improvement achieved in production per man-hour in the nine-year period, the industry spent more than \$100 million in new equipment, buildings and machinery, adding: "That proves that certainly most, if not all, our increase is due to improved equipment."

Now, he said, what the industry needs to do is to devote its attention to improving "the human factor"-to doing more intensive work in the creative field of human engineering. Scientific management is dependent completely upon "an atmosphere of good human relations." The survival of textile plants, Mr. Bryan declared, is not necessarily guaranteed by new tools and equipment. On the other hand: "The plants that won't survive are those that don't plan, practice and perfect their human relations opportunities."

Dr. Heaton, supporting this contention, delved into it in detail. The great need, he said, is for top management to devote a greater portion of its time to "the human function

in industry."

The significance of human beings in industry and their relationships with each other, he continued, is vital. Therefore, management can profit by undertaking the most serious study of the needs of people and of the ways in which it can create conditions on the job which will meet those needs. These needs include such things as security, trust in leadership, recognition, participation, advancement, wages and understanding of personal problems. In this regard, he said, the role of the supervisor is of paramount importance. He discussed ways and methods for training supervisors to enable them to recognize and understand these human needs and to meet them.

Following his first address, the textile executives themselves participated in a round-table discussion to exchange experiences in their own plants in meeting these needs.

Frank A. Constangy, Atlanta attorney, presented a special report in which he discussed the present status of labor relations in the South,

### **New Officers**

The association elected as its new president Henry McD. Tichenor, president of the Walton Cotton Mill Company, Monroe. George H. Hightower, of the Thomaston Mills, Thomaston, was named vice-president, and W. C. Vereen, Jr., of the Moultrie Cotton Mills and the Riverside Mfg. Co., Moultrie, was elected treasurer. T. M. Forbes and

Frank L. Carter, both of Atlanta, were re-elected executive vice president and secretary, respectively.



George H. Hightower



Frank Carte



H. McD. Tichenor



T. M. Forbe

Elected new directors were: Albert C. Gray, Coats & Clark Inc., Atlanta; A. J. Strickland III, Strickland Cotton Mills, Valdosta; Winston F. Garth and Harry H. Purvis, both of Chicopee Mfg. Co., Lumite Division, Cornelia; P. N. Collier, Callaway Mills Co., LaGrange; J. H. Cheatham Jr., Dundee Mills, Griffin; William D. Ellis, Southern Mills, Atlanta; Paul K. McKenney, Jr., Swift Mfg. Co., Columbus; and P. L. Shaeffer, Carroll Mills, Carrollton.

The association adopted a resolution of tribute to and sympathy for the families of the following who died during the past fiscal year: Clifford Jewett Swift Sr., chairman of the board, Swift Spinning Mills, Columbus; Claude Dowling Morris, president and general manager, Palmetto Cotton Mills, Palmetto; Harold Lamb, president, Union Mfg. Co., Union Point; and Paul A. Redmond, Sr., of Birmingham, Ala., chairman of the board, Anchor Rome Mills, Rome.

# A Program Of Co-Operative Promotion

### Annual Meeting, National Association of Wool Manufacturers

By RUTH FROST

A promotional theme highlighted the 91st annual meeting of the National Association of Wool Manufacturers that was held at the Waldorf-Astoria in New York on May 3. Speakers recommended "co-operative promotion" to stimulate and increase business in the men's and boys' wear field.

In an address to the morning session, Francis DeW. Pratt, executive vice-president of the newly-organized American Institute of Men's & Boys' Wear, outlined the plans of the new group for the coming year. It was based on a public relations program. This program has already increased the amount of constructive news and fashion column space devoted to the needs of this industry by more than ten per cent. Another major attack will be made through the beginnings of the institute's advertising campaign.

Also speaking at the morning session was Raymond Rodgers, professor of banking, Graduate School of Business Administration, New York University, who took an optimistic view and pointed out some of the factors on which he based his opinion. He forecast that the economic slowdown probably would reach bottom in late Summer, assuming no upset from the election or the equity market. He said a revival would follow, sparked by the extra-early introduction of really new 1957 auto models and relaxing of Federal Reserve restrictions.

Also good news for textiles, he said, were the decline in consumer spending for durable goods and the drop in food prices. The best news, however, Prof. Rodgers said, was the great increase in population. "Our net reproduction rate has even passed that of Italy and Japan. . . . Literally, the baby crop is the biggest crop in America. And that means

more to the textile industry than it does to any other industry."

He also recommended stepped up promotion, saying the 'low-cost efficient textile manufacturer is bound to do well in 1956 if he produces something new, or something better, or something cheaper—and tells the world about it.'

Dr. Ernest Dichter of the Institute for Motivational Research outlined seven steps by which woolen and worsted manufacturers could increase the demand for wool clothing at the luncheon sponsored by the N.A.W.M. Collateral Group.

Dr. Dichter first recommended developing specific programs for measuring and understanding changes in social and cultural framework, since these are the forerunners of style and clothing changes. Next, he suggested that the industry study the consumer to discover what his unsatisfied needs are. Then, keeping in mind the axiom that we "follow leaders in clothing as well as in politics," Dr. Dichter suggested the creation of "new centers of influence and projected real authorities who will influence acceptance of new design in wearing apparel."

Other recommendations included making the trend toward informality in men's wear work as an asset to the industry, breaking the "old suit complex" and divesting clothing of its utilitarian quality. And finally, he suggested glamorizing men's clothing. "The strength of women's clothing is its allure, its appeal, its style—in a word, its sex. Tear the shroud from man's body and glamorize him in clothing designed to enhance this basic motivation."

Guests at the dinner which closed the annual affair heard T. B. Nilsen, president, Clinton (Mich.) Woolen Mfg. Co., the newly-elected president of the N.A.W.M., stress the greater use of installment selling of clothing and soft goods. He also suggested "the use of every means of stimulating consumer demand for products containing wool,

which may require some emphasis on blends of wool and man-made fibers and exploration of ways to take advantage of the heavy promotion on man-make fibers." He also noted that wool is often the "plus ingredient" that makes blended fabrics the desirable finished products they are in many instances.

Other highlights of the dinner program were the fashion skit and the presentation of the Golden Fleece awards which are made annually to "persons of achievement."

This year the awards went to: General Mark Clark, president of The Citadel, military academy of South Carolina, and noted World War II combat commander and former commander in the Far East; Bernard F. Gimbel, chairman of Gimbel Brothers department stores; Jan H. Moolman, chairman of the executive board, International Wool Publicity and Research Fund, and former chairman of the Wool Bureau; and Tenly Albright, first U. S. woman to win the world and Olympic figure skating championship.

Mr. Nilsen succeeds Harold J. Walter, Bachmann Uxbridge Worsted Corp., Uxbridge, Mass., as president of the N.A.W.M. Mr. Walter was named a vice-president.

Other vice-presidents elected were John L. Hutcheson, Jr. Peerless Woolen Mills, Rossville, Ga.; Minot K. Milliken, Deering, Milliken & Co., New York; Abbot Stevens, J. P. Stevens & Co., Inc., North Andover, Mass.; and Arthur O. Wellman, Nichols & Co., Inc. Boston. Glen F. Brown was renamed secretary-treasurer.

Six directors also were elected. They are D. W. Ellis Jr., A. D. Ellis Mills Inc., Monson, Mass.; J. H. Stursberg, Livingston Worsted Mills, Holyoke, Mass.; Fulton Rindge, Ware (Mass.) Woolen Co., Ware, Mass.; Lewis Muhlfelder, Albany (N. Y.) Woolen Mills; Charles E. Sigler Jr., Charles E. Sigler & Son, New York; and Arthur C. McGowan Jr., Wyandotte Worsted Co., New York.

# A Plan To Promote Textile Education

By HENRY A. RUTHERFORD, Head of the Department of Textile Chemistry and Director of Chemical Research,
School of Textiles, North Carolina State College, Raleigh, N. C.

-Before Eastern Carolina Division, Southern Textile Association-



Henry Rutherford

POR the past several years, enrollment of students in all college-level textile schools in the U. S. has steadily dropped off. At the same time, the demand for textile school graduates has steadily risen to the point where today's graduate averages a choice of seven positions. Both of these trends are clear cut, and are not related to population trends, industry or school location, or types of curricula offered. Beyond any doubt, the present situation is the result of lack of interest on the part of young people in the textile industry and the careers it offers. This lack of interest, in turn, is the

What can be done to interest more young people in textile careers? Here is a proposed plan for doing just that. It has been presented to the American Association of Textile Chemists & Colorists, which has long shown a keen interest in promoting textile education.

result of poor public relations on the part of the textile industry, especially at the level of high school students.

The situation is more critical in the case of textile chemists than for technologists, and extends beyond textile chemistry to the broader areas of chemistry. To cite one example, in the School of Textiles, N. C. State College, the school with the largest enrollment of all textile schools, there are only six students in the sophomore class who have elected textile chemistry.

At its last council meeting, the American Association of

Textile Chemists & Colorists indicated an interest in undertaking efforts to improve this situation. The organizational structure of the A.A.T.C.C. and its record of leadership in industry matters qualifies it as the organization best equipped to spearhead efforts to broaden the interest of young people in the textile industry and its careers. It is the purpose of this brief report to recommend an organized plan for attacking the problem of "no interest in textiles" and to suggest a program to be carried out by the proposed organization.

It is assumed in drawing up this proposal, that the A.A.T.C.C. is willing to undertake an effort commensurate with the serious situation that industry faces. Therefore, after serious consideration of possible means for carrying out the program required, it is proposed that the effort be led by a full-time, paid director for the program who would operate under the A.A.T.C.C. organization, who would carry out the policies approved by the A.A.T.C.C. textile education committee, and who would make use of the organizational structure of A.A.T.C.C. to carry out the program on national and local levels. While such a program would undoubtedly be costly, it is felt that in the light of the cost of the over-all program needed, this expense would be only a minor part.

In this organization, it would be the function of the director or the executive secretary of the textile education committee to formulate plans for attacking the program of "no interest in textiles" on the part of young people. These plans would then be submitted to the over-all education committee for approval, and this committee would charge the director or executive secretary with the task of executing the plans.

The means by which this problem can be attacked are manifold. It is felt that there is little point at this time in going into detail as to how much effort should be put into what particular phase of the program, but rather the final details should be placed in the hands of the proposed director. However, it is fairly obvious that the means that would be employed would include: (1) national and local advertising, sponsored either by funds raised by the education committee or by individual industrial firms as part of their own advertising efforts; (2) radio and television advertising and programs; (3) career information brochures for mailing to interested young men who may make inquiries as the result of advertising and for placing in high schools throughout the nation; (4) co-operative efforts with various guidance groups and youth organizations in providing career information on the textile industry; (5) arrangements for local follow-up of inquiries by local members of the A.A.T.C.C.; (6) arrangements for mills in various areas to participate in career days at high schools and to hold open house programs for interested young people; (7) use of various editorial services in providing information through newspapers and other periodicals; (8) activities to be carried out by textile colleges themselves to stimulate interest in textiles; and (9) efforts to develop scholarships to assist deserving and qualified young men who are unable to attend college for financial reasons. In connection with scholarships, it might be noted here that a recent survey made in North Carolina indicated that seven out of ten of the valedictorians and salutatorians in high school classes did not attend college, primarily for financial reasons. This is a tremendous economic waste that neither the textile industry nor other industry in this nation can afford.

It is estimated that a director of this program could be

### Rhinehardt Is New Chairman Of Eastern Carolina S. T. A.



W. A. RHINEHARDT (left), superintendent of Golden Belt Mfg. Co., Durham, N. C., was elected chairman of the Eastern Carolina Division, Southern Textile Association, at the group's Spring meeting held April 21. He succeeds E. H. Fuller, superintendent of Mill No. 2, Roanoke Mills Co., Roanoke Rapids, N. C. Other

officers named at the meeting include J. C. Farmer, superintendent of Henderson (N. C.) Cotton Mills, vice-chairman; and Prof. E. B. Grover, head of the yarn manufacturing department at the North Carolina State College School of Textiles, secretary. New members of the executive committee of the Eastern Carolina Division are Bryant Stevens of Erwin Mills Inc., Erwin, N. C., and John Dickerson, Cone Mills Corp., Hillsboro, N. C.

maintained at an annual cost of about \$25,000 covering salary, office, supplies, mailing cost, secretarial assistance, and other costs involved. The target for advertising expenditures for the first year for this man should be not less than \$100,000, such expenditures to be paid either from funds raised by the committee or through efforts of the director in persuading various textile firms to expend some of their advertising budget on this matter. While such a financial burden is too great to impose on any one organization and on A.A.T.C.C. in particular, it is felt that the necessary funds can be developed from other industry associations provided the A.A.T.C.C. will take the lead in undertaking the effort required and possibly making an initial small contribution to implement the program. The cost required can also be rationalized on the basis that the textile industry is now being called on to expend funds that it well should have spent in the past, and is making an investment against losses to be incurred in the future through the lack of adequate leadership.

It has then been concluded as the result of extensive study of the textile enrollment situation over the past several months that an immediate and highly serious effort is called for, and that the nature of the effort required is such that it cannot be carried out adequately by voluntary members of various sub-committees. Evidence of the seriousness of the situation is inherent in figures presented at North Carolina State College—that out of the total of 1,075 applicants for entrance into the college this Fall that have paid registration fees, 753 were registered for engineering and only 48 were registered for textiles or textile chemistry. It should be emphasized that this is typical, and is not merely a local condition. Considering that the mortality rate of students matriculating in the School of Textiles is in the neighborhood of 50 per cent, and considering that some ten per cent of students at the School of Textiles come from abroad, and again that this situation is typical, it is evident from these figures that the textile industry will have 'sparse pickings" in 1960.

In addition to the above we propose the following:

(1) A joint meeting of association representatives, mill

executives and representatives from textile education to combat the general attitude of "no interest in textiles." This should come spontaneously from concerned mills, associations and colleges. We are ready to attend such a meeting at any time, but there must be other expressions of interest.

(2) A survey of textile education and the place of its graduates in industry.

(3) Action to provide immediate career information on textiles to the high schools of the entire country. We hope A.A.T.C.C. will hold the lead in this program and soon have its career brochure released.

(4) More active participation by industry executives in

the advancement of textile education, not as a result of our pleading but as a result of enlightened self-interest.

If these four steps can be followed, other and no doubt better suggestions will evolve through the interactions of the groups working together. Textile education, like research, is not a thing apart from industry. It is of vital significance to industry—not a step-child, but a legitimate member of the textile family. Its problems are industry's problems and vice versa. All we are really asking is a positive, co-operative approach to mutual problems. We must, all of us, actively combat this public attitude of "no interest in textiles" and we cannot ourselves act as though we had no interest either.

# Opening, Picking, Carding & Spinning



D.L. F. D.

# The Fruits Of Spinning Modernization

By ROBERT E. POMERANZ, President, Roberts Co., Sanford, N. C.

-Before Eastern Carolina Division, Southern Textile Association-

More attention is currently being given to spinning modernization than any other plant process. In noting this, the author outlines a preferred order of importance of the various elements which should be considered in a spinning modernization program.

No machinery modernization holds the attention of large and small mill organizations like spinning modernization does today. There is a sound reason for that interest in the well-known ratio that costs in the spinning room average three times as much as all costs which precede it.

While it is certainly true that the card room operations must be up to date, and that every spinning system needs good roving, sufficient proof exists that nothing should delay drafting system modernization. In almost every case a modernized drafting system will improve the results from any quality of roving stock and at the same time the areas of the card room where improvements might be made will be highlighted.

You know the story of a golfer who hit the ball into the deep rough but saw his caddy out looking for it on the edge of the fairway—"It's over this way, Joe," he shouted. "I know," Joe replied, "but it's easier to look over here."

During the course of our supplying modernization material for more than 2½ million spindles and in observing a smaller number of modernizations supplied by other manufacturers, we have determined a preferred order of importance of the various elements which should be considered in a spinning modernization program. It is generally best to do a thorough job of modernization of any group of

frames, and where possible it may be best to modernize a small group of frames completely, rather than doing a partial job on all the frames. But, practical mill management frequently ask us this question: "Where can we spend the least amount of money and get the most results for it?".

First of all, attention should be given to the drafting system. This is the basic channel which affects yarn quality, and it is the foundation on which you must build the opportunities to reach higher front roll speeds, larger roving and spinning packages, reduced ends down, higher spindle speeds and higher spinner job loads. Dollars spent in drafting system modernization usually will provide the quickest return.

Secondly, mills should consider ball bearing spindles, cylinders and tape tension pulleys, and all of the related items. This would provide an increase in the size of the package as well as increased cylinder and spindle speeds plus many other benefits.

Third, a new open-type creel should be considered especially where roving packages are to be increased or where full bobbins cannot now be used, and for the added benefit of substantially reducing cleaning.

Fourth would be a consideration of suction cleaning in order to permit the maximum drafts available from the modernization drafting system and to achieve most satisfactory spinner job loads.

Hand in hand with these four major steps should come the scrutiny which every wide-awake mill, even one not modernizing, must give to its rings, to building the bobbin, and to control of oiling procedures and other similar standard maintenance items. The cost to improve the bobbin

LINT FREE CREEL TINT FREE CREEL FREE CREEL LINT FREE CREEL LINT FREE CREEL Iresenting FREE CRE Tension-rite Bobbin Holder by Pneumafil Here at long last is an entirely new kind of bobbin holder-one that maintains the desired CRE constant tension, eliminates roving stretch and prevents roving sluff off WITHOUT THE USE OF DRAG ARMS This new design conforms to the LINT FREE CREEL-following the AIR FOIL principle which eliminates the accumulation of The Tension-rite bobbin holder is simple in construction-solid aluminum alloy with-FREE glasslike finish-exclusive Bolite bearing provides compensating tension—unique gripping head holds bobbin positively—bobbin creeled and removed easily-BOBBIN CANNOT VIBRATE OFF! CREEL There are only 5 pieces in the Tension-rite bobbin holder-nothing to go wrong-no parts subjected to excessive wear-a bobbin holder to give you a long lifetime of uninter-LINT FREE CALL rupted and satisfying service. Let us show you this all new Tension-rite Bobbin holder FREE PHEUMAFIL CORPORATION\_ CHARLOTTE 8, NORTH CAROLINA Pneumafil Economizer Unit System Central Air System Central Material Recovery System Lint Free Creel Tension-Rite Bobbin Holder Pneumastop ® Pneumacard ®

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build through an overhaul of the lay driving gears, cam and cam shaft, builder motion, Pitman roll, chain pulleys and traverse connecting rod pins is so small per spindle that no alert mill can overlook it. Also the use of a one-shot oiling system, hardened studs and hardened gears in the head and other related items are a "must" if the basic spinning frame is worth anything at all.

In presenting the above order of preference, I must indicate that since Roberts Co. manufactures all of these items itself, we have no axe-to-grind and these recommendations are made on the basis of a wide examination of the returns and benefits enjoyed by many mills.

The fruits of spinning modernization program are many. You can make up your own list of what you want from such a program: higher front roll speeds, more sides per spinner, reduced ends down, higher break factors, better non-uniformity, larger roving packages, or you can wrap all of them up in five words "lower cost and better quality."

It is our practice to check monthly various installations of our equipment in the mills to determine first of all what the current trend is on performance and secondly to see how our equipment maintains consistency of this performance. In presenting you the following figures, we should point out that mills equipped with spinning modernizations supplied by other manufacturers should be able to achieve equivalent results.

Three yarn types are represented in this particular survey. Print cloth warp yarns, sheeting warp yarns and 20s carded sales yarn. Those of you who run these numbers can easily write your figures along side these results for comparison purposes, and mills running other constructions might project these figures to their own jobs.

In presenting any results such as these it must be pointed out that many factors affect the performance from one mill to the next. Of course, roving preparation is most significant, but many other factors such as condition of the rings and front bottom rolls, type of humidification system and overhead cleaners, long draft cleaning cycle, and other similar items would provide a big difference from one mill to the next. The importance would come in how a specific operation was improved.

Recently we supplied our completely modernized spinning frames for the entire operation of a mill whose output is 83,000 pounds per week of a combination of 80 square and 64 square print cloths. The results achieved are typical of what is being done in many mills today.

- (1) It was possible to reduce the working force by 48 people.
- (2) A reduction in roving inventory was achieved due to elimination of one roving process.
- (3) An increase of about ten per cent of total yarn output is being obtained although wider gauge frames are being used
- (4) Output of baled cloth will run approximately ten pounds per man-hour in opening and picking through the cloth room.
- (5) Yarn output will average three pounds per spindle per 120-hour week.

# Performance Results—Roberts High-Draft Systems Sheeting and Print Cloth Warp Yarns Results obtained week of April 2, 1956

	Print	Cloth	She	eeting		rded s Yarn
Mill	Α .	В	C	D	E	F
Yarn Number	311/2	311/2"	211/2	211/2	211/2	20
Hank Roving	.70	,60	.72	.55	.55	.66
Package Size	12 x 6	12 x 6	12 x 6	12 x 6	12 x 6	12 x 6
Draft	45	52	30	391/2	391/2	301/2
T. M. Yarn	4.07	4.15	4.22	4.23	4.21	3.50
RPM Front Roll	144	148	165	. 148	163	168
Break Factor	2340	2210	2285	2200	2253	2300
Non-Uniformity	95	93	65	64	64	62
Ends Down	26	23	29	22 _	31	20
Spindles per Operator	3480	3300	1656*	3000	3036	2912
Suction Cleaning	yes	yes	no	yes	yes	no
Frame Gauge	31/4	31/2	31/2	31/2	31/2	3
Diameter Ring	2	17/8	21/8	21/4	2	2
Tube Length	9	91/2	10	91/2	10	9
Drafting System	Roberts	Roberts on Roth	Roberts on Roth	Roberts on Cas.	Roberts on Cas.	Roberts on H&B
How Long Installed	1½ yrs.	3 yrs.	13/4 yrs.	3 yrs.	5 yrs.	1 yr.

<sup>\*</sup>On this installation, spinner does all cleaning

# Warp Preparation & Weaving

# Recent Developments In Automatic Weaving



Craig Huff

By CRAIG HUFF JR., Division Manager, The Draper Corp.

-Before Eastern Carolina Division, Southern Textile Association-

POR many years the Draper Corp. has used the slogan "Retaining Leadership Through Research." In a very few words the slogan expresses the philosophy of our company in the field of machinery development. In spite of generally poor business and lower earnings in the recent past, our research and development activities are being carried on at a high level. These efforts are aimed in the direction of improved automatic weaving machinery which will produce the most first quality cloth at the lowest cost per yard, the common goal of us all.

The sphere of activity of the greatest interest to you is in the improvements which have been made in existing models of looms. The metamorphosis of the X-2 Model loom is a splendid example of our continuing efforts to make looms which are in the field more productive and capable of making better cloth. You are all thoroughly aware of the demands for improved quality in the markets you sell. Part of our job is to enable you to meet your customers' requirements.

One of the most prominent causes of seconds in the weaving of full feeler cotton goods is the misspick. As a result of the experience gained in weaving synthetics on XK and XD Model looms using a center fork filling stop motion, we were able to engineer this construction for the X-2. It causes the loom to stop on the pick in which the filling breaks. Its optimum effectiveness is attained when combined with the efficient braking action of transmitter-driven looms. It has been widely adopted by mill men as a must on new looms for high quality cotton goods; and a substantial quantity of existing looms have been changed to it. The center fork will not stop your filling from breaking; but, properly applied and maintained, it will give you the insurance you want against misspicks.

Hand in hand with the center fork in cotton weaving goes the recently designed high roll ratchet take-up. This motion, which operates from a pick wheel drive by the sword, generally on a pick for pick basis, is somewhat simpler than the more familiar worm take-up. It allows for either an exact manual matching of the pick or for a predetermined amount of automatic let-back whenever a filling break occurs. This take-up is available with or without the Nutting bar, and either coarse or fine pitch gearing. As adjunct to this development we have engineered for the

Here's a progress report from the Draper Corp. citing improved features developed for the company's automatic looms. Attention is also called to Draper's most ambitious project —a practical shuttleless loom.

X-2 an independent chain and sprocket-driven wind-up replacing the friction-driven rack and gear-type which most of you have. The separate wind-up makes it possible to doff cloth while the loom is running and avoids telescoping cloth rolls.

The X-2 Model, long known only as a cotton loom, has invaded the synthetic field. In response to mill requests for a high-speed cam loom for spun and filament synthetics, the X-2 has been modified to handle these fabrics. The principal construction change was in the take-up where we now furnish a double-roll high roll ratchet construction with the independent wind-up. This loom is commercially successful and we look forward to substantial sales in mills whose styling permits the harness limitations imposed by a cam loom or 12 harness dobby application.

We are constantly trying to improve loom efficiencies at high speeds. One of the more recent developments in this area is the linkage parallel, a new approach to an old problem. With this device, which operates on the principal of a four-bar link, we find that we have a positive, fully constrained picking action which contributes to smoother shuttle flight, improved boxing, simplified adjustment, and, we think, longer life of shuttle box and pick motion parts. We now have the linkage parallel available for the X-2 as regular construction, and on XD Model looms several trial applications have been made recently.

Along with it we have available an aluminum pick arm connected to the long lug strap with an aluminum casting and which in turn is joined to the pick arm by a Unibal joint. The short lug strap is eliminated, and there is no binding action during the pick. The light weight of the aluminum parts reduces the forces in the picking system and make for longer life in the parts connected with it.

Another X-2 design change has resulted in what we call the extended lay. This design consists of longer lay ends which permit the shuttle to box one-inch deeper than heretofore. This allows more space in which to arrest shuttle flight and gives us better shuttle control and improved boxing at high speeds.

You are all familiar with the improved loom performance

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afforded by the extruded aluminum lay and the power transmitter-type of drive. Both of these features are now universally accepted as standard X-2 Loom constructions.

Our efforts toward developing a precise, consistent, automatic let-off for synthetic weaving are continuing. A mill trial is being made of a new approach which looks encouraging and we hope soon to have it available for the mill with XD Model looms.

Our XP-2 wide sheeting loom is coming along quite well. We have made a number of limited installations, and in view of the progress made in recent months, we look forward to regular production of this model before long.

Other recent loom improvements of interest include the following: (1) the No. 25 thread cutter, a simplified design replacing the Stafford cutter; (2) an underslung temple for the XD Model loom which removes the temple bar from the breast beam and eliminates oiling problems; (3) a two-piece replaceable cam shaft gear, which consists of a hub fixed to the shaft and removeable rim; and (4) the No. 3 selvage post attachment, more generally known as a Crow Hop. This is a sturdy, simple, effective selvage needle which pivots in a torsional rubber bearing.

In the field of shuttles the long-sought-for commercially-practical non-wood product has appeared in the form of the Tru-Mold. This is a molded blank with the shuttle tips cast integrally with the plastic material. It has great dimensional stability and, because it is insensitive to changes in temperature and humidity, will allow fittings to stay tighter for

longer periods. Its durability seems to be much greater than wood, and its use should result in longer shuttle life.

Research on bobbins has resulted in several new finds. The most important is the impregnated quill which has given splendid results on continuous filament yarns. The hardness of this bobbin enables us to get an extremely smooth surface over which all of the various conventional finishes can be applied; and, when made with a solid barrel, the impregnated bobbin has resisted the crushing action of nylon and similar yarns better than any quill we have yet seen. Two new finishes are now available. One is designed to resist to a much greater degree than conventional oil and lacquer finishes the degrading action of chemical wetting agents. The other provides a very smooth surface finish together with good protection against dimensional changes under limited steam conditioning treatments at less expense than baked enamel.

In the realm of unmarketed developments, one project is the elimination of the conventional battery. We now have on trial a magazine unit, using direct spun or rewound filling, which will permit upwards of 200 bobbins depending on the package size, to be in place on the loom at one time. Early reports indicate that this mechanism has merit.

So far as the shuttleless loom is concerned, its status is best described by our president, Mr. Thomas West, in his recent report to the stockholders when speaking of recent outlays for research and development: "A major part of these expenditures for the past decade has been spent in an attempt to produce the long-dreamed-of practical shuttleless loom that could compete successfully with the highly refined, conventional automatic fly-shuttle loom of today. At





Horne, Bell-Inderfurth, Quick, Goody, Fox

LINDLY AUTOMATIC YARN INSPECTOR — Lindly & Co. Inc. demonstrated its new automatic yarn inspector at a public showing last month at the Selwyn Hotel in Charlotte, N. C. More than 200 chief engineers, mill managers and superintendents attended the two-day showing. Looking over the machine (left, above) are Kenneth Horne, Hornwood Warp Knitting Corp., Wadesboro, N. C., and Allie Bell, Burlington Industries, Asheboro, N. C. Shown (right, above) discussing the machine are Karl Inderfurth, Lindly's Southern representative; Gregory Quick of Kingsboro Mills Inc., Daisy, Tenn.; William Goody of Kingsboro Mills; and Tom Fox of Lindly & Co. Inc.

The automatic yarn inspector is a variable sensitivity optical and electronic device capable of measuring variations in yarn diameter on a single or multiple-end basis. It is designed primarily to perform as yarn inspector during a productive operation, eliminating the establishment of inspection as a separate job. The instrument uses an electronically constant source of light which is passed through a lens and aperture arrangement which effectively renders the light parallel and screens out the unused portion. If yarn is introduced between the light source and the photo-electric system the inspection unit is able to determine diameter variations.

The relay can be connected to operate a counter, a beamer stop motion or any device or combination of devices desired. The minimum speed at which the standard model is designed to operate is approximately 50 yards a minute, although it can be built for lower speeds. The maximum is well above 100 yards per minute. Lindly reports that many new applications of the unit are being discovered constantly.

times during this period, attainment of this goal seemed unlikely and progress discouragingly slow. The shuttleless loom is still several years from the market, and the sectors of the textile industry for which it is suitable are not entirely clear. However, during the past year we have come to feel that the worst is behind us and that prospects for the new system of weaving are excellent.'

The art of automatic weaving, considering the productivity of and the machine loads assigned to looms today, has come a long way since the last decade of the nineteenth century when the Northrop battery was developed. It seems unlikely that revolutionary advances in weaving technology will soon come about; but real progress is to be seen in the steady month-to-month advances which are being made in the direction of making looms more automatic, more efficient and requiring less labor. It is your responsibility as mill men to keep up with, evaluate and adopt those devices and machines which give promise of helping you produce the best possible cloth in the least expensive man-

# A Study in Loom Fixing

By FRANK D. HERRING-Part Eight

This series is being presented to help the beginner become a better loom fixer in a shorter period of time, as well as to enable the established loom fixer to become more efficient, by learning to avoid the wasted time spent in searching for the cause of trouble when a loom is flagged.

WHEN a loom is out of fix and the loom fixer is called to work on it, he should know the things to check to determine the cause of the trouble. A good loom fixer knows this is true and consequently has made a study of the usually apparent symptoms indicating the source of the trouble. When he goes to a loom, he usually locates the trouble quickly, does the job and gets the loom back in production without unnecessary lost time and haphazard guesswork. The only way a fixer can become a first-class loom fixer is to learn how to eliminate guesswork. Guesswork loom fixing seldom leads to the source of the trouble, but will usually create additional and unnecessary work for the fixer by leading to parts, which should not have been moved, getting out of adjustment.

Too many loom fixers do not follow this positive approach in their work because they have not been properly trained. In other words, they failed to get the fundamentals of loom fixing during their training period. If a fixer is interested and wants to learn and improve, he can do so. If he does not have this ambition, he is not worth his salt. It is never too late for him to do so; however, he will become a first-class loom fixer much quicker if he is con-

vinced of this basic fact.

When a fixer is called to a loom, he can usually detect immediately if there is a broken part causing the loom to fail to function. So the finding of the broken part does not require much skill, but usually the proper replacement of the broken part, the checking of the necessary items to prevent a recurrance does require plenty of skill and knowledge. Not only should he know the things to check to prevent a recurrance, but he should also know the things to check that could be thrown out of adjustment when the replacement of the broken part is made.

This constitutes efficient loom fixing and this type of fixing will enable him to stay ahead of his job and keep to a minimum the number of looms awaiting his attention. This helps to maintain a good production from his section

of looms. In this article, the trouble will be named, followed by the things the fixer should check and adjust or replace, that could be the cause of the trouble.

### **Broken Swords**

Replacing a broken sword is a time-consuming job and unless the fixer is given some help on this job, he will usually have a number of looms stopped and awaiting his attention when the job is completed.

After the sword has been replaced, the fixer should check the following parts, in the order named, to prevent recurrance of breakage.

Protector rod daggers and fingers

Frog steels

Forward position of lay

Frog packing

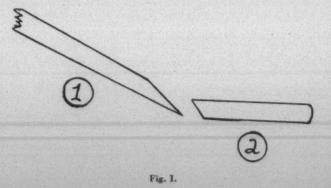
Rocker shaft bearings

Shipper handle knock-off mechanism

Shuttle Boxing

This list for the fixer to check might seem to be excessive and unnecessary, but if everything is not properly adjusted and in good condition, it can contribute to the breaking of

The sketches shown in Figs. I and I are (1) protector rod daggers, and (2) frog steels. Fig. I shows these parts in good condition. Fig. J shows both parts excessively worn and in need of replacement. Fig. I shows the protector rod dagger and the frog steel as they appear just before contact when the lay is moving forward. The protector rod daggers are attached to the lay and, of course, they are moved backward and forward with the rotation of the lay. The frog



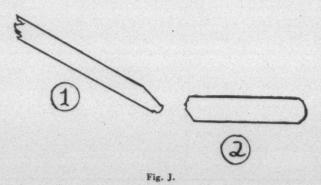
steels are a part of the frog assembly which are stationary parts mounted on the frame of the loom.

While the loom is in operation, the protector daggers will be raised high enough to clear the frog steels, provided all the parts associated with this operation are functioning properly, but if all parts are not operating as they should, the daggers will not be raised high enough to clear the steels. When this contact is made, the loom will slam or stop off.

The protector rod daggers, and the frog steels are case hardened parts. This is necessary to enable them to withstand the compact without excessive wear and breakage.

If the protector rod daggers are too high when they make contact with the frog steels, they will have a tendency to slip over the steels and fail to make sufficient contact to stop the loom off and in this event, the case hardened points of the daggers and the steels will become chipped or rounded off as shown in Fig. J. When this condition exists, there will be excessive breakage of the swords because occasionally one of the daggers will lock with the steel while the dagger on the opposite end slips over the steel and will fail to stop the forward motion of the lay simultaneously on both ends. Of course, this will create excessive strain on the sword on the end of the lay where the dagger and steel are in contact, as this sword is forced to absorb the strain put on it by the forward momentum of the lay on the opposite end where the dagger and steel have failed to make sufficient contact.

If the protector rod daggers and frog steels are in the condition shown in Fig. J., they should be replaced with new ones.



After the fixer has replaced the broken sword and checked and made the necessary replacements, if needed, on the protector rod daggers and the frog steels, he should remove the filling bobbin from the shuttle and place the shuttle all the way up in the shuttle box on the battery end of the lay. Then he should turn the crankshaft to place the lay on exact front center position, then remove all the filling bobbins from the battery and press the transfer hammer down by hand, all the way, and then see that the back face of the transfer hammer clears the inside back wall of the shuttle from 1/16 (minimum) to one-eighth (maximum) of an inch. Of course, this adjustment is made by turning the crank arm eccentric pin backward or forward as the need might be. With the lay still on front center position, the fixer should measure the exact distance from the

inside wall of the breast beam of the forward edge of the race plate on the battery end of the loom. Then he should check and adjust the position of the lay on the opposite or shipper end the same. This will square the lay with the breast beam, and relieve all unnecessary strain from the swords and the lay. Next, the fixer should remove the shuttle from the shuttle box and turn the crankshaft to place the crank arms on bottom center position. Then he should check the protector rod daggers and fingers to determine if the tip end of the daggers are positioned properly in relation to the frogs. Then turn the crankshaft to move the lay forward until both the protector daggers are in contact with the frog steels. With the lay in this position, both of the frogs should be tight in position. If one of the frogs is loose, it is a sure indication that the rubber packing in it is excessively worn and, in this event, the fixer should pack the loose frog sufficiently to tighten it in the abovementioned position.

Next, the fixer should check the rocker shaft and rocker shaft bearings, because if there is excessive wear on either the shaft or bearings, it will allow the lay to rise when the loom slams off and this will sometimes allow the protector daggers to slip and lose contact with the frog steels and this will cause sword breakage, at times.

Then, the fixer should check the shipper handle knockoff mechanism and make sure that the shipper handle is released from running position when the daggers contact the frog steels and slams the loom off. If the loom is allowed to run when it is slamming off and failing to remove the shipper handle from running position and releasing the power, it will cause sword breakage, and also breakage of other parts.

Finally, the fixer should put the shuttle back in the loom and check to see if it is boxing properly on both ends. If the shuttle boxes and the protector rod fingers are properly adjusted, the protector rod daggers will clear the frog steels without tipping when the shuttle is all the way up in either shuttle box. The daggers should clear the steels about one-half inch. If they don't, it will cause sword breakage occasionally.

This completes coverage on replacement of broken sword and the things to do to prevent sword breakage, but in doing the above things, the lay has been moved out of its previous position and, as there are a number of things dependent on the forward position of the lay for proper operation, it is necessary to check the following parts before putting the loom back in operation: the filling feeler, the filling fork in relation to the filling grate, the temples, the bobbin transfer mechanism, and the filling thread cutting device.

America by 1975 will be a land in which marriages and births will have a new and profound effect upon our economy. The National Association of Manufacturers cited a speech by Dr. Robert C. Turner, professor of business administration, Indiana University, before the student body of the College of Business Administration, University of Georgia, regarding these expected developments. Dr. Turner said, in part: ". . In the middle of the late 1960s, a sharp upturn in the rate of net family formation: . . . A wave of babies in the 1970s of startling proportions, with consequent, subsequent impact on schools, demand for houses, children's goods, etc."

# Bleaching, Dyeing & Finishing

# The Perkin Centennial (1856-1956)

### **Commemorating The Discovery Of Aniline Dyes**

By ANSCO G. BRUINIER JR., E. I. du Pont de Nemours & Co. Inc., Wilmington, Del.

One hundred years ago, William Henry Perkin discovered the first synthetic dye. Of course, the dyestuffs industry hasn't been the same since. This paper, in calling attention to the Perkin Centennial to be held at the Waldorf-Astoria Hotel in New York City next Sept. 10, traces the history of the dyeing industry back to earliest times.

TODAY it is difficult to realize the significance of the discovery of the first synthetic dye by William Henry Perkin 100 years ago. We have come to expect the availability of all types of dyes developed for specific applications, and the countless variety of all kinds of colored articles and merchandise that are within our reach bears this out.

Prior to 1856 the story was quite different. The early efforts of man to duplicate the beauty and color of his surroundings was attempted by staining clothes with colored juices derived from flowers, fruits, bark of trees, insects and shellfish. Most of the resultant dveings were only temporary because so few true dyes existed in Nature that the variety of shades was limited and generally did not stand up to the effects of sunlight and washing. However, there were some colors that had survived the ravages of time. Indigo was one and the renowned Tyrian purple another. A garment dyed with indigo was found in the ancient Egyptian city of Thebes, in a tomb reputed to be 3,000 years old, the color having been derived from the leaves of the indigo plant. The "purple of Tyre," famed for its beauty and durability, was obtained from different varieties of shellfish and expertly manufactured by the Tyrians. However, dyed fabrics were a luxury and could only be afforded by royalty and the wealthy as evidenced by the names "royal purple," "royal scarlet" and "royal blue." Pliny condemned the high prices charged by dyers for Tyrian purple. A pound of it cost the equivalent of what would now be \$150, a striking difference when compared with the present-day figure of \$1.17 per pound reported by the U.S. Tariff Commission for the average price of all dyes produced

The continued desire of individuals to maintain beauty of surroundings through more durable colors led to the use of mordants which possessed the ability of causing the dye to adhere firmly to the fabric. Not until this discovery was made, probably in India prior to 2,000 B.C., did the art of dyeing make any appreciable progress. Through this mordanting technique the Egyptians were able to use the Biblical scarlet, the last of the "big three" dyes of that

early period, which was obtained from the insect, kermes. The color was so highly regarded that it was reserved primarily for royalty and the military and was used in the military cloaks of the Greeks and of the Roman emperors.

Yellows were produced by the Egyptians from saffron, derived from the flowers of the common yellow crocus. Reds were developed from the roots of the madder plant, which was also used to produce purples and browns. The brilliant and durable scarlet, "turkey red," was probably known before the Middle Ages; it was developed in the Near East and later adopted by the Europeans. The dyeing process required for applying turkey red is one of the oldest known and also the longest, and it is believed by some historians that the scarlet thread mentioned in the 38th Chapter of Genesis was dyed in this manner.

The skills of the dyers in Egypt, India, China and Persia were brought into Europe by the Phoenicians and Alexandrians, but little technical progress was made on the con-

### **Centennial Participants**

In connection with the week-long celebration of the Perkin Centennial commemorating the discovery of the first synthetic dye-mauve-to be held at the Waldorf-Astoria Hotel in New York City next Sep. 10, the following technical, scientific and industrial societies will participate: The Society of Dyers and Colourists (England); American Association for the Advancement of Science; Optical Society of America, Inter-Society Color Council; American Chemical Society; Synthetic Organic Chemical Manufacturers Association; Manufacturing Chemists Association; American Psychological Association; U. S. Department of Commerce; National Retail Dry Goods Association; Canadian Association of Textile Colourists and Chemists; Textile Research Institute; Dry Color Manufacturers Association; The Color Association of the U.S. Inc.; National Paint, Varnish and Lacquer Association; Technical Association of the Pulp and Paper Industry; The Society of the Plastics Industry; National Research Council Advisory Committee; Institute of Food Technologists; American Pharmaceutical Association: Society of Cosmetic Chemists; American Society for Testing Materials; Good Housekeeping Institute; American Section of the Society of Chemical Industry; American Standards Association; and The American Leather Chemists Association.

tinent until the 13th century because most of the dyeing was done in the home. At that time, the accomplishments of Federigo in Italy stimulated a considerable revival in the art. The first book on dyeing was published in Italy in 1429, and from there knowledge spread to Germany and the rest of Europe, centering especially in Holland and Belgium. The discovery of the New World and the opening of the Cape route to the East brought in coloring materials and dyeing methods. Cochineal, similar to kermes, was imported from Mexico early in the 16th century by the Spaniards who had seen the natives employing these insects for dyeing.

But as long as man was dependent upon the animal and vegetable worlds for his dyes, his progress was restricted by the skill of the operator in mixing dyes and perfecting techniques. Dyeing was then an art, not a science as it is today. The dyes available varied greatly in quality and, consequently, so did the results obtained. Many of the natural dyes lacked fastness and were difficult to apply satisfactorily to fabrics. They were also expensive. There is little evidence to support the idea which has been so firmly fixed in the minds of many, that to obtain durable and artistic effects it was necessary to resort to the vegetable dyes of our ancestors. Dyeing is now based on soundly-established chemical principles, the end results can be predetermined, the fastness is known and the correct dyes can be selected to conform with the requirements of the finished fabric, garment or article.

Little fundamental progress was made in producing, better dyes until the accidental discovery of mauve in 1856. William Henry Perkin was attempting to synthesize quinine, using aniline as one of his raw materials. In one of his unsuccessful experiments a dark-colored mass was formed, but when it was dissolved in alcohol a violet liquid resulted which had the power to dye silk and wool. Had it not been for the presence of toluidine as an impurity, the development of the first synthetic dye might not have occurred at that particular time. Perkin had the foresight to recognize the industrial possibilities of his invention and, after patenting the process, established the first factory in the world for the manufacture of dyes.

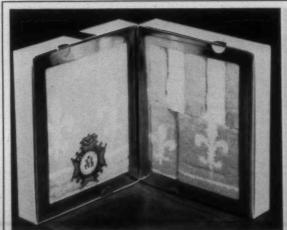
Compared to some of the present day processes for vat

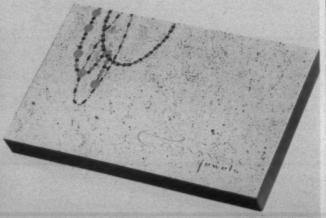
and other type dyes, Perkin's method of manufacturing mauve was quite simple, consisting of only four steps. The yield of actual dye was only five pounds per ton of coal, and in 1860 the price of aniline violet in the United States was around \$300 per pound.

The publication of Perkin's discovery activated interest in the study of the chemical composition of coal tar products by chemists all over the world. During the following 50 years, many important discoveries followed one another in rapid succession. It was found that of the ancient dyes, indigo and turkey red could be produced synthetically and more economically than the natural products. Despite intensive activity on the part of chemists, the time element between the development of new dyes in the laboratory to practical commercial production usually was a matter of years. By 1890, synthetic dyes had attained considerable stature and natural dyes were well on their way to obscurity.



European chemical manufacturers had established a virtual monopoly of the dye industry and prior to 1914 only ten per cent of the dyes consumed in the United States were made here. In that year the domestic production was less than seven million pounds. This production did not represent complete preparation of the dyes, but merely combined certain intermediates with other raw materials to form the finished product. When foreign sources of supply were cut off, a number of chemical manufacturers started the production of dyes. By 1917, 81 concerns were engaged in dye production but the range was limited to those for which the need was greatest. The initial hazards were many;





PRIZE WINNERS IN TEXTILE PACKAGING were these gift boxes developed for the Fairfax (Ala.) Mill of West Point Mfg. Co. and for Cannon Mills Co. by Old Dominion Box Co. Judges in the 1956 set-up paper box competition sponsored by the National Paper Box Manufacturers Association marked the Martex towel box (left) for first award in textiles. Honorable mention in textiles, as well as honorable mention in construction, went to the Cannon towel gift box.

lack of experience, financial barriers and other factors soon eliminated many of the pioneers and by 1937 the number of domestic producers had dropped to 43, who produced over 122,000,000 pounds at a sales value averaged at 58 cents

per pound.

Today, within a span of about 40 years, America is self-sufficient and has a dye industry that is unsurpassed. Its products are the equal of any produced by other nations. Dye-consuming industries have at their disposal an annual production of around 150,000,000 pounds of coal-tar colors consisting of more than 1,000 different dyes—and which

embody degrees of fastness capable ot meeting almost every normal requirement. These range from the durable vat dyes that possess outstanding resistance to most color-destroying influences to dyes suitable for application to any of the new synthetic fibers. No longer is royalty the sole owner of colored vestments. The development of synthetic dyes, along with improvements in textile manufacture, allowing mass production of moderately-priced fabrics of good quality, has permitted the wide use of color in our daily lives, thus providing the means to a richer, more beautiful, more colorful world.

# Maintenance. Engineering & Handling

# The Importance Of Mill Lubrication



K P Powers

By K. P. POWERS, Product Application Engineer, Gulf Oil Corp., Pittsburgh, Pa.

-Before Eastern Carolina Division, Southern Textile Association-

THE history of the manufacture of textile materials and the development of machinery designed to increase production and decrease cost of yarns and fabrics is a very interesting story. From the earliest times, man has known the art of spinning and weaving, but it has only been during the last 200 years that appreciable mechanism has been employed in the industry.

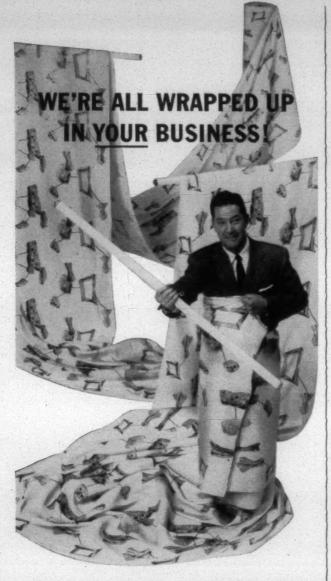
Toward the end of the 18th century, inventors such as Paul, Arkwright, Hargraves and Crompton brought about many radical changes which permitted decreased costs and increased productivity. The story is fascinating as it reveals the mechanical realization of many complicated manual movements. Along about this same time the utilization of horsepower and water power brought about an awakening to a new concept of industrial efficiency. Later on, steam power and electrical power along with machine improvements resulted in new high standards of quality in finished products. Simultaneously, there occurred an awakening to the possible reduction in costs which could be obtained by minimizing friction, machine wear, vibration, power consumption and quantity of rejected material. This latter phase of the textile industry's development is the place where correct lubrication has played an important part.

In recent years developments in engineering which have resulted in higher temperatures and heavier loading and, consequently, greater production, have forced management and engineers to become more lubrication conscious. However, there are still many consumers of lubricants within the textile industry who are content with products which merely prevent bearings from overheating, and who do not

Faster machine speeds have forced management and engineers to become more and more lubrication conscious in the past few years. They have found that for the sake of economy and efficiency proper lubrication is essential. Here are some factors to consider in doing this important job the right way.

take into account loss of efficiency through the use of less than ideal lubricants. Management has always been reasonably aware of the difficulties encountered with unsuitable lubricants and generally gives this matter consideration, but many are still chiefly influenced by price. Some are reluctant to change from an established practice which has given satisfaction. The latter often take much convincing before they will use lubricants having ideal characteristics for the many operating conditions of textile machinery. It is frequently very difficult to sell management on the idea of making a radical change in lubrication even though such a change incorporates a new idea which may be very beneficial.

The use of additives in lubricants has become a very universal practice and over the years one property after another has been improved until finally some lubricants bear little resemblance to the original base oil from which they were made. Lubricating oils with additives have many applications in textile mills and management should be alert to the use of these types of products since they can lead to more efficient and economical plant operation. However, it should be kept in mind that the use of additives is complex and no two oils react in the same way to specific additives. A proposed additive requires thorough laboratory and field testing, and the improved characteristics desired must be secured without adversely affecting the base oil;



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therefore, when the advantage of a lubrication additive is apparent in a textile mill, it should be used as compounded by the lubricant supplier and not purchased separately and added to base oils, as undesirable side effects may be introduced.

In the early days of the use of mineral oils it was usually believed that they could be compared with each other by the consideration of their physical characteristics. Actual experience over the years made it evident that physical characteristics gave no real indication of an oil's ability to lubricate and, therefore, there was some quality which one oil possessed over another which was not made evident by tests of this type. It is now recognized that two lubricating oils may have similar properties but differ in the amount and quality of the service they render.

With such knowledge available it is pertinent to mention the trend in recent years of large firms to buy on specifications. It has been said that specifications may be described as being either protective or selective. Protective specifications attempt to provide a guide which will insure against the purchase of inferior, contaminated and unsuitable material. Selective specifications are drawn up to define characteristics that are believed to be necessary for satisfactory performance. Setting down the properties of complex mixtures like mineral oils is not a guarantee to their ultimate chemical composition, and with present knowledge it is not possible to define that composition completely. A selective oil specification is only a description of characteristics and cannot always guarantee the lubricating ability of the oil. It is quite possible for oils to meet specifications and yet be unsuited for the service for which they are intended. The selection and application of lubricants to the many different needs of textile mills requires much study and experience. By purchasing from an oil refiner who has established a reputation for the quality and uniformity of his product, the lubricant consumer can make certain that he will receive the type of lubricant best suited to his requirements. It is up to the purchaser to satisfy himself as to which supplier will provide the most efficient service, not only by furnishing the correct oils, but by continuing to guard his interests with helpful advice on their proper use and application. When buying under these conditions, the consumer has the benefit of knowing that he has formed a connection with specialists whose advice and co-operation will always be available.

Unfortunately, hand oiling of bearings is a common method used with textile machinery. While hand oiling has been used for many years, it will be seen to be unsatisfactory when carefully examined. Immediately after each application of oil, an oversupply of lubricant is present in the bearing. This results in excessive leakage. However, shortly after the application there is usually such a small amount of oil left in the bearing that although leakage is no longer taking place, metallic contact with consequent friction, wear and high power consumption is present. It could be stated that the condition of oversupply resulting from frequent oiling might be preferable because the consequences are less serious.

With textile equipment, however, there is one important consideration which must be borne in mind. Oversupply and consequent leakage must be avoided since it will result in serious production troubles. There will be oil throw with consequent staining and spotting of yarn and fabric. Satisfactory operation in the textile industry can be accomplished only through small applications of lubricant at regular intervals. It will be readily seen that best results will be obtained through the use, wherever possible, of bottle oilers or mechanical multi-point lubrication systems, which furnish a supply of lubricant controlled as to amount and frequency

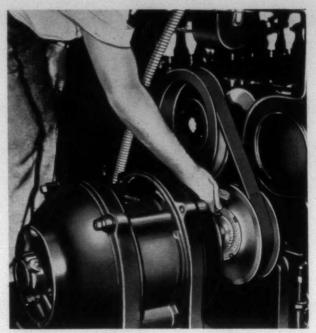
of application.

The type of lubrication provided by such restrictive feeds to a journal bearing results in an absence of oil pressure, which is caused by lack of sufficient oil in the clearance space. There will be no lifting action on the journal and no separation of the lubricated surfaces such as is provided when a copious amount of oil is available. The only protection against friction, wear and power consumption is the very thin films of oil that adhere to the metal surfaces. Lubrication of this type has been called boundary lubrication because these films are microscopic in thickness and sometimes allow metallic contact under heavy load. In order to prevent excessive wear, friction and power consumption, satisfactory oils must have a characteristic which has been called "persistence-of-film." Such a characteristic enables the thin layers of oil to adhere so tightly to the lubricated metal surfaces that normal operating pressures will not remove them. This feature is found only in specially manufactured oils whose superiority in the textile industry has been proven through reduced maintenance and power costs and by the minimization of spotting and staining.

In addition to the consideration of hand-oiled bearings there are many special lubrication problems in textile mills such as the splash lubrication of comb boxes and the bath lubrication of high-speed spindles. A suitable lubricant for a comb box must be fluid enough to penetrate quickly to all working surfaces and to flow back to the reservoir for recirculation. An oil in this service is called on to take heat away from the bearings and carry it to the walls of the comb box where it will be radiated to the surrounding atmosphere. The comb box lubricant must have enough film strength to protect against metal-to-metal contact in the presence of intermittent load. It should be stable enough to last a long period without developing sludge or increasing unduly in viscosity.

The selection of the correct oil for use in textile spindles is extremely important. It has been stated that power consumption in the spinning room may amount to as much as 60 per cent of the total power used by a mill. Since many spinning frames have 200 or more spindles the greatest portion of spinning frame power use is in spindle bearings. Considering this, it is evident that great savings are possible through the selection of the proper spindle lubricants. In such an application the spindle oil must lubricate the spindle with a full fluid film in the bearings, but with the lowest possible body in order that the internal friction of the lubricant and consequent power loses may be kept to a minimum. However, the oil should be heavy enough to cushion the action of the bolster and thus absorb vibrations caused by unbalanced bobbin conditions.

It is obviously impractical to discuss in detail the lubrication of all types of machinery used in the textile industry, but it is certainly in order to state that proper lubrication of textile machinery can lead to large savings. If lubricants are correctly selected and if systematic methods of application are established, efficient operation of textile machinery can be relied upon.



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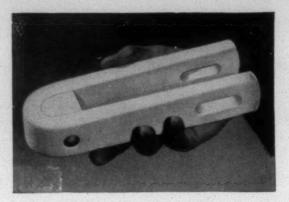


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# PERSONAL NEWS



R F Guill

R. F. (Bob) Guill, sales representative for Keever Starch Co., Greenville, S. C., has been assigned to cover eastern North Carolina and Virginia for the company. Mr. Guill has been with Keever for the past year. A graduate of Georgia Tech in chem-

ical engineering, he will continue to travel out of Concord, N. C. . . . . The company has also appointed two new sales representatives, C. B. Phillips and Sam S. Rice Jr. Mr. Phillips, former industrial engineer with Burlington Industries and a graduate



Sam S. Rice Jr



C. B. Phillips

of the University of North Carolina, will cover South Carolina, making his head-quarters in Greenville. Mr. Rice, a graduate of Alabama Polytechnic Institute at Auburn, will cover parts of Georgia and South Carolina, making headquarters at Anderson, S. C. He was formerly with West Point Foundry and Machine Co.

E. D. Maynard, superintendent of Chronicle Mills, Belmont, N. C., since 1915, has retired. Mr. Maynard had been with the company since 1903. Succeeding him is Buford Robbings, formerly with York (S. C.) Mills Inc.

T. E. Perry of Spartanburg, S. C., has been named assistant overseer of carding for Clinchfield Mfg. Co., Marion, N. C.



Ralph Barnard

Ralph G. Barnard, research extension specialist for the department of textile research, North Carolina State College School of Textiles, has established an office at the North Carolina Vocational Textile School, Belmont, where he will be available to

mills in the Piedmont area for on-the-job

consultation relative to the various processing research activities under way at the Raleigh institution. Mr. Barnard is a native of Cramerton; N. C., where he spent ten years working at Cramerton Mills prior to pursuing his formal education at Belmont Abbey Junior College and North Carolina State College. After receiving his degree in textile manufacturing at Raleigh he was in development work for Burlington Mills at St. Pauls, N. C. In 1953 he joined the research department at the N. C. State School of Textiles, where he has been active in the waste reduction and high-production carding projects.

L. H. Jordan, manager of the Addison Plant of Kendall Cotton Mills, Edgefield, S. C., has been named manager of the company's newly-acquired mill at Albertville, Ala. The plant was acquired from the Abney interests. Succeeding Mr. Jordan at Edgefield is J. N. Jenkins, superintendent of the Kendall Upper Plant at Pelzer, S. C. Mr. Jenkins is chairman of the South Carolina Division of the Southern Textile Association. . . Jack Harris, assistant to manager at the Pelzer plant, succeeds Mr. Jenkins as superintendent of the Upper Plant.

Charles L. Gerli, former president of National Mallinson, a member of Burlington Industries Inc., has joined Klopman Mills Inc. in an executive capacity. Klopman operates three rayon plants in North Carolina—at Asheboro, Central Falls and High Point.



James S. Meek

James S. Meek has been appointed to the design engineering staff of Southern States Equipment Corp., Hampton, Ga. Mr. Meek was formerly with Union Carbide Nuclear Co., Oak Ridge, Tenn., and has had wide experience in product design. He

is a graduate of Bradley University, Peoria,

Dan C. Minich has joined Scheuer & Co. where he will be concerned with the technical activities of that company and its affiliates. Mr. Minich for the past eight years had been with Cone Mills Corp. where he served as superintendent of the spinning and weaving mills producing synthetic blends. He also operated a pilot plant for Cone Mills where styling, designing and fabric development were conducted. Prior to his

work with Cone, he was with Burlington Industries and Dan River Mills.



R. M. McCrary

R. M. McCrary, superintendent and secretary of Carolinian Mills Inc., High Shoals, N. C., has been elected president of the Lincolnton (N. C.) Rotary Club. He will take office in July. Mr. McCrary is a member of the board of governors of

the Southern Textile Association, and is immediate past chairman of the association's Piedmont Division.

Tarlton F. Parsons has been appointed to the Warwick Chemical Co. division of Sun Chemical Corp. Mr. Parsons will be responsible for converter and manufacturer relations and the promotion of all Warwick textile chemicals including Norane and Impregnole water repellents, Suntone colors and Prym resins.



Von D. Oehmig

Von D. Oehmig has been appointed Southern representative for Meinhard & Co. Inc. Mr. Oehmig, who will make his headquarters in Columbus, Ga., is a graduate of Dartmouth College and the University of Virginia. He has been

with Crompton-Richmond Co. for several years. In his new post, he will work closely with Edward F. Skinner, vice-president of Meinhard in charge of Southern mill clients.

Clarence Waugh, waste and noils buyer at the Boston, Mass., office of Amerotron Corp., will be transferred to the company's plant at Barnwell, S. C., where he will supervise the purchase of byproducts and wool for the Barnwell and Tifton, Ga., plants. Mr. Waugh, before joining Amerotron, was a buyer for the American Woolen Co. for many years.

Ted V. Fisher, vice-president in charge of sales for Puritan Chemical Co., Atlanta, Ga., sanitary chemical manufacturer, has been elected Southern regional vice-president of the National Sanitary Supply Association. During his two-year term, Mr. Fisher will attend board meetings in New York, Chicago, Los Angeles and other major cities

where he will represent N.S.S.A. members from the states of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky and Virginia.

Joe L. Finley has been appointed sales representative for Chemical Processing Co., Charlotte, N. C. Mr. Finley, formerly with Pacific Mills at Columbia, S. C., will cover North Carolina and Virginia for the company.

Honorary memberships in Phi Psi textile fraternity were bestowed on three prominent textile executives recently at ceremonies at Alabama Polytechnic Institute, Auburn. Receiving honorary degrees were Joe L. Lanier, president, West Point (Ga.) Mfg. Co.; P. N. Collier, general manager, Elmrose Division, Callaway Mills Co., LaGrange, Ga.; and B. G. Stumberg, Tallassee (Ala.) Mills.

Donald Comer Jr. has been elected president and treasurer of Cowikee Mills Inc., Eufaula, Ala., succeeding L. Comer Jennings who has retired. Other officers elected include Ike B. Blue and J. B. Rogers, executive vice-presidents; J. Craig Smith, vice-president; A. M. Schaub, vice-president and secretary; and Archie Clark, vice-president and assistant secretary.

David W. Stapleton has been elected president of Stowe-Woodward Inc., Newton, Mass. Mr...Stapleton, who has been executive vice-president of the company since 1954,



E. W. Peterson, David W. Stapleton

succeeds E. W. Peterson who has assumed the duties of chairman of the board of directors. Stowe-Woodward manufactures custom rubber-covered rolls and mechanical rubber products for the textile industry.

J. V. Roberts has been named superintendent of Princeton Worsted Mills, Kingstree, S. C. The plant was recently purchased by Deering, Milliken & Co. Mr. Roberts was formerly with Hatch Mill Corp., Columbus, N. C. Deering, Milliken plans to operate the plant under the name of Kingstree Mfg. Co.

Harold W. Smith, controller and secretary of Cone Mills Corp., Greensboro, N. C., has been promoted to treasurer to succeed Ceasar Cone. He continues as controller. . . . Lewis Morris, assistant treasurer, has also been elected secretary to succeed Mr. Smith.

Louis F. Prossen has been named manager of the manufacturing department, textile division, Celanese Corp. of America. He succeeds Harrison C. Givens Jr. who was recently appointed vice-president, operations, Celanese International Corp. In his new position, Mr. Prossen will supervise manufacturing operations at all Celanese textile

plants with particular emphasis on plant processes, equipment and quality control. He will be located at the company's textile division headquarters in Charlotte, N. C. Mr. Prossen has been with Celanese since 1946, serving as plant industrial engineer at the Rome, Ga., rayon fiber plant. In 1950 he was made manager of the Hopewell, Va., plant. That was followed by a staff assignment as industrial engineer for the textile division. In 1953, he became assistant manager of textile plant operations and, in 1955, production manager of the division's manufacturing department. . . . Alex Rose, director of engineering for the textile division, recently completed 15 years of service with the company. He was presented with a service pin in recognition of the event.

R. Donald Harvey, for many years general manager of the Lindale, Ga., division of Pepperell Mfg. Co., was recently named 'Man of the Year" in Floyd County, Ga. Mr. Harvey graduated from Georgia Tech with a degree in textile engineering in 1920. He joined Pepperell in 1926, and was named superintendent of the company's Lindale division in 1930. In 1933 he was promoted to assistant agent, then to agent in 1937. His title was changed to general manager in 1939, and he served in this post until he retired due to ill health in September 1955. He was elected to the board of Pepperell in 1952. Active in textile circles, Mr. Harvey served the Cotton Manufacturers Association of Georgia as a director for three years, as treasurer during 1946-47, as vice-president during 1947-48 and as president during 1948-49. He is also a past chairman of the Textile Operating Executives of Georgia.

Nelson N. Harte, formerly a director and vice-president of Barnes Textile Associates, Boston, Mass., and Spartanburg, S. C., has been appointed general superintendent of Morgan Cotton Mills Inc., Laurel Hill, N.

John D. Duskin Jr. has been appointed assistant to the president of Wellington Sears Co., and has been transferred to the parent company from West Point (Ga.) Mfg. Co. Mr. Duskin joined West Point as manager of the cost department in 1952 and has served in various executive positions since that time. He is a graduate of the Citadel.

Thomas L. Carroll has resigned as assistant to the executive vice-president of the National Cotton Council to accept a position with Harry J. Krusz & Co., public relations, Lincoln, Nebr.

William A. Coleman and Harry Lynn Parker Jr. have joined the sales staff of Blackman-Uhler Co., Spartanburg, S. C., a division of The Andover Co. . . . A. F. Neister Jr. has joined the company as a laboratory technician.

Charles R. Walters, vice-president and director of Abney Mills, Greenwood, S. C., has been elected to the Charlotte, N. C., board of Wachovia Bank & Trust Co., Winston-Salem, N. C. Mr. Walters was assistant vice-president of Wachovia before he joined Abney in 1947. . . C. O. Walker, manager of the Stonewall, Miss., division of Erwin Mills was honored recently at a luncheon

given by the board of directors of the Clarke County (Miss.) Chapter of the American Red Cross. Mr. Walker served as county fund chairman in a recent very successful drive put on by the chapter. . . . Ralph C. Genoble, safety engineer for Abney Mills, received an invitation from President Eisenhower to attend the President's Conference on Occupational Safety, held in Washington, D. C., May 14-16.



William B. Amos

William B. Amos of Atlanta, Ga., has joined Wica Chemicals Inc. of Charlotte, N. C., as sales technician. Mr. Amos has had extensive experience in textile dyeing and finishing, including a number of years with the Eagle & Phenix Division of Fairforest

id

Co. of Columbus, Ga., and as superintendent of dyeing and finishing for The Jefferson (Ga.) Mills Inc. For the past three years he has been associated with Stein, Hall & Co. as sales technician. His appointment is in anticipation of Wica's establishment of plant and warehouse facilities in Atlanta to serve Georgia, Alabama and Tennessee.

Albert G. Myers, chairman of the board of Textiles Inc., Gastonia, N. C., has been named "Man of the Year" by the North Carolina State College Chapter of Phi Psi, honorary textile society. Mr. Myers, a native of Chesterfield County, S. C., began a banking career in Charlotte, N. C., in 1898 as a clerk with the Merchants & Farmers National Bank. He moved to Gastonia in 1905 and helped organize the Citizens National Bank, of which he is currently chairman of . the board. He is a member and former president of the N. C. Cotton Manufacturers Association, and is a member of the Southern advisory committee of the National Association of Manufacturers. He was awarded an honorary degree of doctor of textile science by N. C. State College in 1949



Donald B. Pascal

Donald D. Pascal has been elected executive vice-president of National Starch Products succeeding the late A. A. Halden. Mr. Pascal has been with National Starch throughout his business career, having joined the organization in 1929. A graduate of Brooklyn

Polytechnic Institute, he has served in many managerial capacities throughout the company. His most recent post was as vice-president in charge of sales. He is also director of the company. . . William C. Buffing, formerly controller of the company, has been named treasurer. Mr. Buffing is a graduate of the New York University School of Accounting and Finance.

James F. Whalen Jr., sales representative for Becco Chemical Division, Food Machinery & Chemical Corp., Charlotte, N. C., has been appointed Midwest district manager for the company with headquarters in Chicago, Ill. Succeeding Mr. Whalen at the Charlotte office is Edward A. Dalmas. . . . Dr. Max E. Bretschger has retired as president of Becco after 30 years with the division. Frederick A. Gilbert succeeds him as president, but Dr. Bretschger is continuing with the company as senior technical advisor.



W. Harry K

W. Harry King, general manager of IPA Southern Inc., Greenville, S. C., textile finishing machinery dealer, has been elected president of the company. IPA Southern is affiliated with Industrial Products of America, Paterson, N. J. Mr. King is a tex-

tile engineering graduate of Clemson College and has been calling on Southern textile mills for the past eight years. He will continue to make his headquarters in the National Bank Building, Greenville.

Dr. George McCoy has been named manager of the research and development department of the Pennsylvania Salt Mfg Co. Dr. McCoy, a native of Philadelphia, Pa., joined Pennsalt in 1944. Since then he has served as senior research chemist, group leader, assistant director and director of organic research.



John W. Fulbrig

Ciba Co. Inc. has announced the appointment of a new sales representative and two technical staff appointments. John W. Fulbright has been named to the sales force, and John F. Clark and Jack B. Williamson have been added to the technical

staff. Mr. Fulbright, a native of Charlotte, N. C., has been with Ciba since 1954, and has recently been assigned to the company's Charlotte office. His experience in the field includes dye application laboratory work, dyehouse supervision and sales work. He is a graduate of Davidson College. . . . John



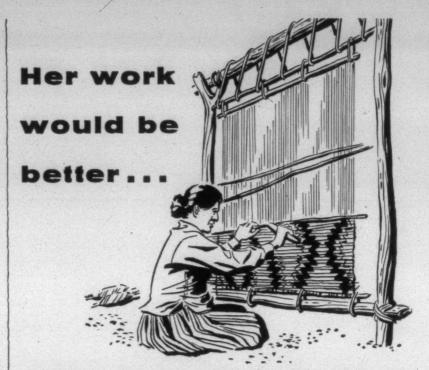
John F. Clark



Jack B. Williamson

Clark has been assigned to the company's Charlotte office as a dye technician. He is a South Carolinian and a graduate of Clemson College. . . . Mr. Williamson has also been assigned to the Charlotte office as a dye technician. A native of Fort Mill, S. C., his experience in the application of dyes covers both laboratory and plant work.

Two promotions have been announced in Du Pont's textile fibers department. Edgar H. Bleckwell has been advanced to director of the nylon manufacturing division and



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You can count on Clinton starches to do a consistently good sizing job on every warp thread . . . to make your weaving easier, better.

Clinton starches give you the dependable quality that makes yarns weave at high efficiencies . . . turn out first rate textiles that'll pass the most discriminating inspector's final check. In fact, many mills use Clinton starches as a standard of comparison. They increase warp strength to easily withstand abrasion . . . reduce friction . . . smooth fuzzy fibres. Clinton starches give your fabrics proper crispness and body when used in the finishing process too.

Choose Clinton starches. You can depend on them ... warp after warp after warp.



### PERSONAL NEWS-

Emil O. Johnson has been named production manager for nylon. Mr. Bleckwell, formerly nylon production manager, succeeds the late George E. McClellan. Mr. Johnson, who had been assistant nylon production manager, succeeds Mr. Bleckwell. Mr. Bleckwell joined Du Pont in 1934. He entered nylon production at the Martinsville, Va., plant in 1944, and after various supervisory assignments there and at Seaford, Del., and Chattanooga, Tenn., he became manager of the Chattanooga nylon plant in 1951. He was named technical manager of the nylon manufacturing division in 1952 and had been nylon production manager for the past three years. . . . Mr. Johnson joined Du Pont in 1935. In 1952 he was named assistant manager of the Kinston, N. C., Dacron polyester plant, and in 1953 he was appointed manager of the Seaford, Del., nylon plant. He was named assistant nylon production manager last January.

T. Harold Daniel has been appointed traffic manager of P. H. Hanes Knitting Co., Winston-Salem, N. C. Mr. Daniel has been with the company since 1940.

Thomas L. Stilwell has been named sales manager of the textile machinery division of The Warner & Swasey Co., Cleveland, Ohio, to succeed Eugene R. Gardner. Mr. Gardner retired May 1 after 44 years with the company. Mr. Stilwell joined the company in 1948 as a special apprentice. In 1950 he was made textile field engineer for the Philadelphia, Pa., territory. In February 1956 he was named assistant sales manager of the textile machinery division. . . . Herman K. Jennings has been appointed district manager in the company's Charlotte, N. C., office. Formerly textile field engineer for the company in the Carolinas, Mr. Jennings will supervise activities in a seven-state area including Alabama, Georgia, Florida, Kentucky, North and South Carolina and Tennessee. He will make his headquarters at 624 Pecan Avenue in Charlotte. He has been with the company eight years. Chester J. Haug, formerly with The Warner & Swasey Research Corp., New York City, has been transferred to the sales office in Atlanta, Ga., as field engineer for a fivestate area which includes Alabama, Georgia, Kentucky and Tennessee. Mr. Haug has been with Warner & Swasey for the past 15 years.



Robert Scholes

Robert Scholes, formerly vice-president in charge of engineering and production for Fidelity Machine Co., Philadelphia, Pa., has been named vice-president in charge of production for the Fletcher Works, manufacturer of narrow fabric looms, yarn throwing equipment and centrifugals. In his new post, Mr. Scholes will direct the complete streamlining of the production divisions of the Fletcher Works, according to Edward T. Taws, Fletcher president. Mr. Scholes, an engineer from Pennsylvania Military College, joined the Philadelphia Gear Works in 1936. He was with Fidelity

### OBITUARIES

John Marshall Berry, 83, president of The Berryton, Ga., Mills, died April 29 in Rome, Ga. A native of Rome, Mr. Berry was widely known in Southern textile circles. Survivors include his widow and four daughters.

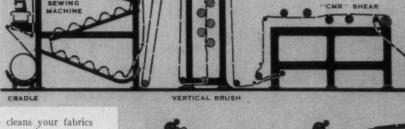
Claiborn McDowell Carr Sr., 71, retired vice-president of American Enka Corp., died April 17 in Asheville, N. C. Mr. Carr served as treasurer of Durham (N. C.) Hosiery Mills from 1910 to 1922 and as president from 1922 to 1928. He joined American Enka after leaving Durham Hosiery, and was instrumental in organizing Enka's first sales organization. Since retiring in 1951, he has served as a member of the Enka board of directors and of the executive committee. Mr. Carr leaves three sons-Claiborn M. Jr. of J. P. Stevens & Co., M. Boylan of American Enka, and Rufus T. of Joshua L. Baily & Co.

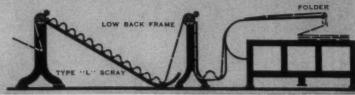
John W. French, owner of Groton

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Southern Sales and Service

South Carolina National Bank Building, Greenville, S. C.

(Vt.) Bobbin Co., died recently of attack in San Francisco, Cal. Survishis widow and two sons.

Frayser Jones, 60, former vice-prof Martel Mills Corp., Spartanburg, and Henrietta Mills, Caroleen, N. G. April 21 in New York City. Mr. J. consultant at the time of his death, in been a director of Franklin Proceed Providence, R. I., and Clyde Fabris Newton, N. C. He is survived by his a brother and two sisters.

Andrew M. Law, 79, founder of Law & Co., Spartanburg, S. C., investiff dealing chiefly in textile stocks, April 16 in Tryon, N. C., after an illne two weeks. Mr. Law founded the investiff 60 years ago. He retired four years but had continued active in the stock brage business until recently as a partnical Calhoun & Co. Survivors include daughters and a brother.

George E. McClellan, 57, directed the nylon manufacturing division of textile department of E. I. du Pont Nemours & Co. Inc., Wilmington, I died April 15 in Wilmington. Mr. Mclan had been with Du Pont 32 years. He made manager of the company's Sprual Rayon Plant at Richmond, Va., in 19 became director of rayon production 1945, and was appointed assistant manage of the rayon division in 1947. In 1951, he was made director of rayon manufacturing and in 1952 became director of the nylon

April 22. Mr. Thurmond joined is in 1913 as paymaster. He was treasurer in 1950. Survivors inwidow, a son, a daughter and a

C. Tift, 64, vice-president of Cotton Mills, East Point, Ga., ly at his home in Tifton, Ga. He by his widow, a daughter, two brother.

Vilson, 64, president of Wilson roducts Inc., Charlotte, N. C., died in Charlotte. Mr. Wilson, a past and life member of the Carolina sociation, was also head of Pen o., manufacturers' agent for Kahn an Inc. and The Hemingway & Mfg. Co. Survivors include his daughter and two sons.

r W. Young, 70, former resident of Franklin Process Spinning Mill erville, S. C., a subsidiary of Frankss Co., Providence, R. I., died last his home in Rutherfordton, N. C. and began his textile career at the 5 with the late S. B. Tanner at (N. C.) Mills. He was later sudent of Cleghorn Mills and Grace Mill Co., both of Rutherfordton, N. he time he was also associated with fills (now Burlington Mills), Cram-N. C. From 1927 to 1946 Mr. Young sident manager of Franklin Process and Mill.



Try this for size — Supranyl, Stein Hall's miracle size for nylon warps. It's unaffected by heat — and still it can be readily removed in your scouring bath. But that's not all! Supranyl, because of its unsurpassed affinity and adhesion to nylon yarns, offers you maximum protection against abrasion in weaving.

Find out now how Supranyl can save you many dollars in your operation. It requires no additives... stands greater dilution... and your initial cost is lower. Write today for more information. Textile Department TB-5

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... yet is Easy to Remove!



ATLANTA, GA.—The board of Fulton Bag & Cotton Mills I sale of the firm to three No textile firms for more than \$12 offer, \$20 a share, was made by ford Jr., Shuford Mills Inc., C.; Julius W. Abernethy, Car Maiden, N. C.; and Mo; Inc., United Mills, Mount Gilead, N. owners plan to continue the op out any immediate changes is and have employed Werner I sultants of New York City Fulton, founded in 1868, manu finishes cotton goods and prod and cotton bags, multi-wall pap cotton products. It employs more persons.

Greenville, S. C.—Union here, has recently purchased a material handling system for one houses from the W. D. Dodenhoi of Greenville. The system consist roller, belt and roller conveyors.

LEAKSVILLE, N. C.—Fieldcrest shas announced that it will spend \$1 during the remainder of this year current modernization program. T gram to date has already cost the decurrent outlay will be directed to more efficient production rather than expansion. With the \$5.5 million to be spent by Fieldcrest since the company changed hands in October 1953, a total of \$14.5 million will have been invested in modernization in a tenyear period. The major part of expenditures—all but \$250,000—since early in 1954 has been for new machinery.

Harris, vice-president, and manager of Erwin's Durham plants, manager of the presentation during a meeting of the supervision of all of the Durham plants. A. M. Moore Jr., superintendent of Plant No. 6, accepted the award on behalf of the employees.

LANCASTER, S. C.—Springs Cotton Mills is considering major expansion projects at

### TIVITY. SALES AND PURCHASES

its eight plants, according to Col. White Springs, president. Projects udied include an addition of 70,000 feet of floor space to the Lancaster and smaller additions—totaling aphately 100,000 square feet in all—to in Chester, S. C. Expansion projects firm's other four plants have been ly completed or are now under way, not known what effect, if any, the er expansion plans will have on the sed Springs plant in the Chester area.

LUMBUS, GA.—Construction has starter on a \$112,000 addition to Jordan Inc. The new building will enlarge yeave room by 22,000 square feet and provide a storage shed. Provision is made for addition of a second story Figuring equipment in with construction the project is expected to cost an ated \$300,000 in all. Construction is setted to be completed in about four ths.

SAVANNAH, GA.—Construction is expectal to begin soon on a new \$3,200,000 felt mill here. The plant is being built by the Ruberoid Co., roofing manufacturer, on the site of the company's roofing factory. The mill, to contain 58,000 square feet of floor space, will supply Ruberoid with dry felt made from waste paper, wood pulp and rags to be used as a base for asphalt roofing. The company previously got its felt from its plant in Gloucester City, N. J.

KINGSTREE, S. C.—Deering, Milliken & Co. Inc. has purchased all the property and equipment of Princeton Worsted Mills here for an undisclosed price. The plant, which has been idle for some time, will be operated by Deering, Milliken under the name Kingstree Mfg. Co. Inc. The plant is four years old and contains some 56,000 square feet of floor space.

MILLEDGEVILLE, GA.—J. P. Stevens & Co. has announced plans to add some 70,000 square feet of manufacturing space to its plant here. The addition will provide an integrated operation by including dyeing and finishing at the plant. The expansion will not affect operations at Stevens' Dublin, Ga., plant, which has been dyeing and finishing fabrics woven here, the company reports. The number of employees here will be increased by approximately 250. Construction on the addition will begin soon, and completion is expected within 12 months.

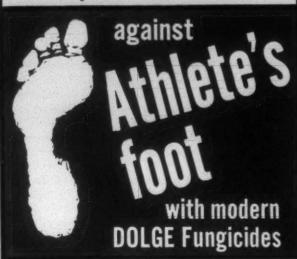
Greensboro, N. C. — Klopman Mills Inc., which for the past several years has leased two of Burlington Mills' filament weaving plants, is now in the process of consummating a lease on other equipment suitable for making spun fabrics. The new development will be headed up by Charles Gerli, formerly of National Mallinson, a Burlington Industries affiliate.

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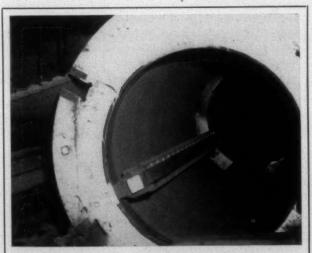
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### The Laurel Leaf

BUSINESS MAGAZINE EDITION



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Laurel RUXITE A is an excellent lubricating and conditioning agent for rayon novelty yarns. It will add softness and improve the running properties. It is a mineral oil type product which forms stable emulsions with water, and may be used either neat or in emulsion form. It is very stable to storage and is easily removed in a regular scour.

If you are dyeing any Arnal-Dacron blends, we suggest you take a good look at LAUREZOL HT for use as an accelerator. LAUREZOL HT will give good unions and is readily removed from the goods after dyeing with a good soaping off and rinse. We recommend about 20% on the weight of the fabric for satisfactory results.

Our regular magazine issue of The LAUREL LEAF is published on a bimonthly basis. It contains interesting facts and helpful data on a variety of textile field subjects. This fact-filled, quick-reading house magazine might provide you with the answer to a tough problem you are facing. The LAUREL LEAF is free. We'll be glad to send you and any other of your plant personnel copies, without obligation. Just drop us a note and we'll put you on the mailing list.



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Top Combs, Half Laps and Winder Guide Combs precision-manufacturer's standard specific actions. Imported English needles of tempered high-tensile steel used exclusively.

### A.C.M.I. Holds Open House At Clemson

Some 100 mill representatives attended the two-day Open House held April 25-26 by the American Cotton Manufacturers Institute at Clemson, S. C. Technical sessions at the event were held at the Clemson House and manufacturers demonstrated the latest in testing equipment at the Clemson College School of Textiles.

The first day's technical session, presided over by John P. Elting, Kendall Mills, Paw Creek, N. C., included the following papers: "The Development of Cotton Fiber Technology in the U.S. and Some Results from Its Application," by Dr. Robert K. Webb, standards and testing branch, Agricultural Marketing Service, U. S. Department of Agriculture, Washington, D. C.; "Cotton Fiber Testing as an Aid to Plant Breeders in the Search for Improved Spinning Performance of Cotton," by E. C. Ewing Jr., Delta & Pine Land Co., Scott, Miss.; and "Importance of Standardization in Cotton Fiber Testing," by Dr. Ruby Worner, in charge of the textile testing unit, Southern Regional Research Laboratory, New Orleans, La.

A feature of the second day's technical session was a report on warehousing methods by J. K. Waits, head of the standards department of Joanna (S. C.) Cotton Mills Co. Warehousing cotton according to fiber fineness has proved highly successful at Joanna, Mr. Waits told the group. He said that the troubles eliminated by the adoption of this warehousing method amounted to about a cent a pound on the cloth. In putting the system into operation, he said, Joanna is using the Micronaire as a working tool on the unloading platform. As each cotton bale reaches the unloading platform, it is weighed and sampled. The sample goes to a Micronaire technician stationed on the platform. Each bale is then tagged with weight and Micronaire reading and fed down a chute to waiting tow carts which pass continuously before four storage points in a U-shaped layout. Bales are tagged at a rate of about 100 per hour.

As each bale passes the storage points, a crew checks to determine whether it goes to that particular point or on to one of the others. Storage points are determined by Micronaire readings—3.6 and under are stored in No. 1; 3.7 to 4.0 in No. 2; 4.1 to 4.2 in No. 3; and 4.3 and up in No. 4. Cotton from the first three goes into filling mix yarns 37s to 45s. Cotton from the fourth goes into warp mix for yarns 28s to 33s.

In the opening room, there are four supply platforms to each blender. Loads are staggered at quarter-bale, half-bale, three-quarter bale and full bale. Equal amounts from each platform are taken for feeding into the blender. As the quarter-bale is exhausted, the half-bale becomes a quarterbale and is moved forward a notch while a full bale comes up as rear replacement.

Mr. Waits noted that several years ago the average cost per bale of Micronaire check was seven cents, but that the cost has since been reduced to about 1.5 cents a bale.

Other speakers during the second technical session included J. B. Denmark, laboratory supervisor of Pepperell Mfg. Co. at Lindale, Ga., who reported on results obtained in manufacturing by proper use of fiber testing equipment; Dr. Burt Johnson of the National Cotton Council, Memphis, Tenn., who reported on "Progress in Reducing Neppiness of Yarns"; and J. M. Cook, head of the Clemson laboratory, Cotton Division, U.S.D.A. Agricultural Marketing Service, who spoke on fiber gauge length and its relation to yarn strength. Acting as chairman of the second technical session was F. H. Martin, Springs Cotton Mills, Lancaster, S. C.

Included among the instruments on exhibit during the Open House was an automatic Micronaire introduced by the Sheffield Corp., Dayton, Ohio. The instrument is said to embody simpler calibration and is reportedly capable of doubling the amount of work produced on the standard

A yarn count Shadowgraph, used to determine yarn count numbers automatically without use of a conversion table, was shown by Exact Weight Scale Co., Columbus, Ohio. Operation is said to be almost instantaneous and the device is sensitive to one-tenth of a grain.

Uster Corp. of Charlotte, N. C., displayed a multi-purpose Hy-Lo indicator said to be capable of counting thick and thin spots in material to within pre-set limits, and a staple diagram apparatus said to reduce the time for evaluating a staple diagram to ten to 15 minutes for drawing frame slivers and combed slivers and to 15 to 30 minutes for raw cotton and card slivers.

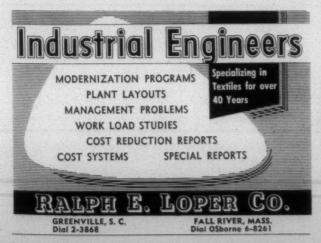
A high-speed Arealometer, Model 165 Speedar, was shown by Special Instruments Laboratory Inc., Knoxville, Tenn. Used for determining fiber fineness, it is reported to eliminate need for pre-weighing the sample. The same company also had on display a portable Arealometer. Weighing 15 pounds, this unit comes in a carrying case for use in the field to determine fiber fineness.

### Charlotte Textile Club To Honor 'Old Timers'

Pioneer textile leaders of the Carolinas who are still active after 50 years of service in the industry will be honored next month at a luncheon given by the Greater Charlotte Textile Club. Announcement of the club's plans for "Old Timers Day" has been made by Robert I. Dalton Jr., president of the club and Southern Agent for Whitin Machine Works.

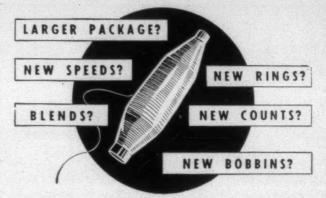
Three outstanding men representing the younger generation of the industry have been selected by the club to keynote this celebration. Hugh G. Chatham, president, Chatham Mfg. Co., Elkin, N. C.; P. Huber Hanes Jr., president, P. H. Hanes Knitting Co., Winston-Salem, N. C.; and James Chapman Jr., vice-president, Inman (S. C.) Mills, each of whom represent textile families of long standing, will deliver short addresses on lessons learned from the "old timers."

Included in the "Old Timers' Club" are: P. H. Hanes





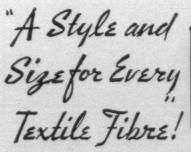
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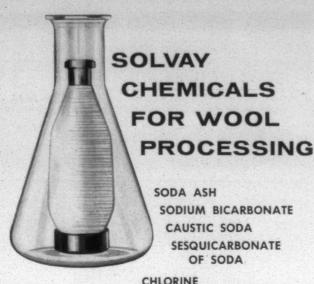




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### Dayton Rubber Textile Products On Exhibit

Latest' developments in rubber products for the textile industry are now being displayed by Dayton Rubber Co. at the mammoth Chemicals and Synthetics Exhibit in the main lobby of the Commerce Building, Washington, D. C. The Dayton display features such textile items as V-belts, check straps, pickers, cots and aprons. Dayton Rubber is among 18 leading U. S. corporations participating in the exhibit, sponsored by the U. S. Department of Commerce and Patent Office. Purpose of the exhibit is to show how patents played a part in the development of new products.

### Packaging Exposition Draws 27,000 Visitors

Some 27,000 persons attended the 25th Anniversary National Packaging Conference and Exposition held April 9-12 at Atlantic City, N. J. The exposition featured a record 387 exhibitors, according to the American Management Association, sponsor of the events. A feature at the conference, held concurrently with the exposition the first three days of the event, was a paper by Richard Manville, Richard Manville Research, New York City, entitled "Increasing Sales with Better Packaging through Market Research." Mr. Manville presented a number of case histories—showing "before" and "after" use of up-to-date packaging developments.

Mr. Manville stressed the importance of market research in determining packaging needs. Research, he said, need not be expensive. It can be formal or informal; it can be done by an outside organization or internally; it can be done by personal interview or by direct mail; but it should be done by an expert looking for facts to prove a point. Packaging is not the label or color of the box, he said. It is the total presentation of the product to the customer in the shape or form the customer wants to buy.

Many exhibitors at the exposition were optimistic about the prospects for increased machinery sales to the textile industry. This optimism stems from the fact that the textile industry has been lagging behind other fields in the use of automatic packaging. Sales to the soft goods field have been increasing slowly but steadily over the past few years, the machinery manufacturers pointed out, and greater strides are sure to follow.

### American Viscose Enlarges College Program

American Viscose Corp. has enlarged its college relations program to include ten more grants for the academic year 1956-57. This aid, in the form of fellowships, scholarships, grants-in-aid and assistance to educational foundations, will benefit advanced education.

Twenty-two fellowships, given for graduate work, have been established in the fields of chemistry, chemical engineering, pulp technology and accounting. Twenty-three scholarships have been awarded to undergraduates who are majoring in textiles, chemistry, physics, engineering and business administration. Seven grants-in-aid have been established to cover textile research, industrial medical research and food technology. American Viscose's college program is designed to encourage the study of science, engineering and business administration. Actual selection of recipients is left to the faculty of each institution. The students who receive the aid are under no obligation to the corporation.

The following institutions have been invited to take part in the program during the 1956-57 academic year: Allegheny College, Bucknell University, Carnegie Institute of Technology, Case Institute of Technology, Clemson Agricultural College, Cornell University, Duke University, Georgia Institute of Technology, Jefferson Medical College, Lehigh University, Lowell Technological Institute, Mary Washington College of the University of Virginia, Massachusetts Institute of Technology, McGill University, Michigan State College, Morris Harvey College, New York State College of Forestry at Syracuse, N. Y., North Carolina State College, Northwestern University, Ohio State University, Pennsylvania State University, Philadelphia Textile Institute, Princeton Textile Research Institute, Purdue University, Renssaelaer Polytechnic Institute, Roanoke College, Rose Polytechnic Institute, Swarthmore College, Texas A. & M., Texas State College for Women, University of Akron, University of Delaware, University of Maine, University of North Carolina, University of Pennsylvania, University of Rochester, University of Texas, Virginia Polytechnic Institute, West Virginia University and Yale University.

### Draper Corp. Announces Scholarship Program

Draper Corp. has announced a plan to provide financial assistance to American colleges and universities. In establishing this program, Draper joins the ever-increasing group of industrial concerns who are recognizing the need of aiding institutions of higher education. The objective is to help colleges and provide improved housing and instruction facilities, with incentives for highest quality teaching in a greater number of subjects; also, to permit over-all expan-

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### A.A.T.C.C. National Council Holds Meet

The national council of the American Association of Textile Chemists & Colorists, meeting recently in Philadelphia, Pa., has approved a proposal to establish a new position of executive secretary-treasurer for the national group. The full-time appointee would make his head-quarters at Lowell (Mass.) Textile Institute, and supervise all A.A.T.C.C. personnel and installations.

The council also approved a new set of blue standards developed under the direction of Frank Rizzo, Quartermaster Corps., Research and Development Branch, Natick, Mass. A suggestion was heard from Henry A. Rutherford, head of the department of textile chemistry, North Carolina State College, that the A.A.T.C.C. appoint a full-time director plus an advertising budget of \$100,000 to create new interest in textile education.

A resolution on standard test methods was also accepted by the council. The resolution reads: "The executive committee on research of A.A.T.C.C., taking cognizance of the fact that some organizations performing fastness tests on textiles use test methods designated as being standard A.A.T.C.C. methods, where the methods actually do not conform with A.A.T.C.C. recommended procedures, goes on record as stating that such different or modified methods should not be referred to as A.A.T.C.C. procedures, and requests that such references be omitted."

### Lowell Tech Establishes A.T.M.A. Scholarship

Lowell Technological Institute has established a scholarship for the coming academic year in honor of the American Textile Machinery Association. Announcement of this scholarship was made at the TEAM (Textile Education and Machinery) Day program, May 10, at which time the institute was host to the A.T.M.A.

In commenting upon the action, Dr. Martin J. Lydon, L.T.I. president, stated: "The A.T.M.A. Scholarship at Lowell Tech is tangible and concrete evidence of the close co-operation which exists between the American textile machinery industry and educational institutions. It is most encouraging to have such a group as the A.T.M.A. demonstrated the control of the cont

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P. O. Box 834 Spartanburg, S. C. strate a progressive and enlightened attitude in encouraging instruction and research on the collegiate level. It is our feeling that this scholarship will encourage competent young people to study for careers of leadership in textiles and thus contribute to the advancement and progress of the industry."

W. Frank Lowell, senior vice-president of Saco-Lowell Shops and A.T.M.A. president, accepted the scholarship in behalf of the association and expressed appreciation for the honor and tribute paid to the association by the institute.

### **Burlington Announces New Scholarships**

The establishment of seven additional scholarships, valued at \$1,000 each at church-related and privately endowed colleges and universities, has been announced by the Burlington Industries Foundation. The seven are in addition to eight scholarships at state-supported institutions which were announced last June when Burlington launched a broad-scale aid-to-education program.

Schools where new scholarships will be awarded for the 1956-57 year are Washington & Lee, Davidson, Wake Forest, Lowell Textile Institute, Philadelphia Textile Institute and Virginia Polytechnic Institute. The grants are payable at the rate of \$500 each for the junior and senior years of students chosen. Eight similar \$1,000 scholarships announced last Summer were put into effect for the current 1955-56 school year at Clemson, Georgia Tech, N. C. State, A. & T. and the Universities of North Carolina, South Carolina, Virginia and Tennessee.

The unrestricted scholarships are awarded to students solely on the basis of leadership, scholarship and financial need. Selections are made by the schools through contact, experience, testing and whatever other information is available. Burlington Industries takes no part in the selection. Announcement of the additional scholarships brings to 15 the total number scheduled under Burlington's four-fold aid-to-education program. The scholarship program will be subject to review from year to year with possible addition of other institutions as the program warrants. In addition to scholarships, the foundation will provide matching grants in identical amounts to schools where the scholarships are utilized.

Since the Burlington Foundation's educational aid program was launched last June it has provided a substantial financial shot-in-the-arm to institutions of higher learning which are close to Burlington Industries and its employees. The aid program is comprised of four parts: (1) matched alumni giving, in which gifts of Burlington employees to





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### Du Pont Describes Tire Yarn Developments

A technical review of developments on nylon and rayon tire yarn from Du Pont's textile fibers research laboratories was presented to more than 100 technical, research and engineering staff members of 17 rubber companies, yarn processors, and equipment manufacturers at Akron, Ohio, April 26.

In discussing fundamental research on nylon and rayon, Dr. C. E. Black, research manager of nylon, described the basic properties of polymers and their crystalline structure, and W. W. Ransom, laboratory director of rayon research, commented on skin and core characteristics and their meaning in yarns. Cord processing developments and the effect of tire curing techniques on fiber performance were reported on by M. Kiachif, research supervisor of industrial products research, who described improved dip stretching in rayon tire yarn and its results. Dr. A. G. Knox, nylon research supervisor, discussed hot stretching and Du Pont's study of results and effects on properties of yarns. D. H. Heckert, supervisor in the tire merchandising section, reported on Du Pont's study of tire cord performance.

R. W. Nebel, laboratory director of industrial products research, described the extensive facilities devoted to research and development of improved cord and Dr. J. M. Swanson, research manager of industrial products research, reported on the effect of performance on tire durability and ride performance. Leading the discussion were H. P. Brokaw, manager of Du Pont's new Akron regional sales office; C. E. Mears, industrial merchandising manager; Dr. P. M. Walters, tire merchandising manager, and R. H. Stafford, assistant industrial merchandising manager.

### Increasing Cotton's Weather Resistance

Acetylation alone does not make cotton significantly resistant to damage from sunlight, and neither does vat dyeing, except for a few special shades. Combine the two, however, and the result is a cotton which, according to weathering tests, not only shows excellent resistance to damage from sunlight, but is also highly resistant to mildew and rot.

The combination of vat dyeing and partial acetylation is being studied at the Southern Utilization Research Branch of the Agricultural Research Service, headquarters for U.S.D.A. research on cotton utilization. Cotton is, and has long been, the principal textile fiber used in "outdoor" fabrics. The new treatment promises to make such cotton fabrics last two or three times their usual life on exposure to weather, with a relatively small increase in weight.

Cotton sheeting, 48 x 48, weighing approximately 5 oz/sq yd., and a scoured 12/3 cotton yarn were used for the tests. The most exhaustive tests yet completed have been on yarn samples, untreated, vat dyed in various shades, and vat dyed and acetylated. These were exposed to natural weathering from May 1954 to May 1955. A sample vat dyed to

eight per cent depth with O.D. No. 7 retained 32 per cent of the original strength at the end of the year, while an identical sample, partially acetylated, retained 49 per cent strength. Sample vat dyed blue and partially acetylated retained 85 per cent strength at the end of a year's weathering. The control samples, scoured and untreated, and scoured and acetylated, dropped to 18 per cent and 24 per cent, respectively, by the end of the year. Sheeting samples also showed excellent results from the treatment.

Details of the treatment and results of the weathering tests are given in "Improved Weather Resistance by Acetylating Vat Dyed Cotton," by W. N. Berard, S. G. Gremillion Jr. and C. F. Goldthwait. Single copies of the paper may be obtained without cost from the Southern Utilization Research Branch, 1100 Robt. E. Lee Blvd., New Orleans 19, La

### Chemical Modification Of Cotton Fiber

Changes in the physical properties of cotton fibers, brought about by chemical modification, have become increasingly important with the rapidly growing importance of this phase of the textile industry. Considerable research on the modification of cotton to produce new and better textile fibers for specific uses is carried on at the Southern Utilization Research Branch of the Agricultural Research Service, New Orleans, La., center for U.S.D.A. investigations on cotton utilization, and research workers there undertook studies to determine the effect of some of these treatments on the physical properties of the fibers.

Results of these studies have been published recently, covering certain physical properties of mercerized, decrystallized, carboxymethylated, aminized, acetylated and cyanoethylated cottons. Properties evaluated were moisture regain, density, linear density, elongation at break, tenacity and modulus. In some cases crystallinity and effects of degree of substitution are considered, and variation in fiber properties with different cottons is also included in the study. Since there is considerable evidence to indicate that properties of untreated cotton will influence the properties of the chemically-treated product, samples for examination were selected from six commercial varieties. Two of these, Deltapine 14 and Rowden 41B, were chosen as subjects for the report, which is the first of a series to be published.

Textile products from several types of chemically-modified cottons are already on the market, and laboratory and pilot plant development of other processes are far advanced. Hence, information contained in the report should be of interest to textile manufacturers and chemists, as well as research workers in the area of cotton and other cellulose fibers. Single reprints of the paper, "Certain Physical Properties of Selected Samples of Chemically Modified Cottons," by James N. Grant, may be obtained without cost from the Southern Utilization Research Branch, 1100 Robt. E. Lee Blvd., New Orleans 19, La.

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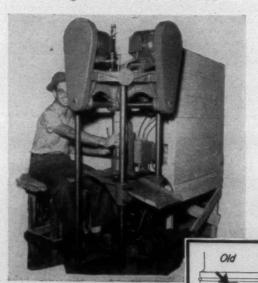
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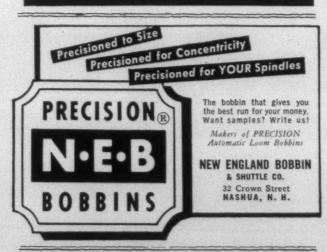
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### March Cotton Consumption, Spindle Activity

Average daily cotton consumption during the month of March amounted to 36,656 bales, according to statistics released by the Census Bureau, U. S. Department of Commerce. This figure compares with 38,030 bales consumed per working day in February, and 35,730 bales per day during March 1955. Total consumption during the month of March amounted to 916,396 bales as compared with 893,238 for March 1955 and 760,590 during February 1956. Cotton stocks on hand at the end of March included 1,730,102 bales in consuming establishments and 15,462,034 bales in public storage. The seasonally-adjusted daily average cotton consumption index for March was 103, using 1947-1949 as the base period.

Total consumption of synthetic staple during March amounted to 42,058 thousand pounds as compared with 48,400 thousand pounds in March 1955 and 37,894 thousand pounds in February 1956. Stocks on hand at the end of the month amounted to 56,994 thousand pounds.

Total number of cotton-system spindles in place during March amounted to 21,997 thousand compared with 22,388 thousand in March 1955 and 21,971 thousand in February 1956. The number of active spindles for March was 20,888 thousand, as compared with 20,901 thousand a year earlier and 20,983 thousand during February. The total number of hours spindles were operated totaled 12,562 million during March. This compares with 12,404 million hours during March 1955 and 10,347 million hours during February 1956.

### February Cotton Cloth Imports Up 200%

United States imports of cotton cloths in February rose 200 per cent over those of February 1955, according to the Bureau of the Census, U. S. Department of Commerce. February imports of cotton cloth amounted to 21,371,000 square yards, valued at \$5.4 million. February 1955 imports amounted to 7,035,000 square yards with a dollar value of \$2.2 million. Imports during January 1956 amounted to 24,367,000 square yards with a value of \$6.1 million.

Imports of other cotton manufactures in February were valued at \$9.3 million, the bureau reports, as compared with \$4.7 million in February 1955 and \$9.1 million in January 1956.

Burlap imports in February amounted to 43,103,000 pounds valued at \$6.8 million, compared with February 1955 imports of 34,531,000 pounds valued at \$5.7 million and January 1956 imports of 51,490,000 pounds valued at \$7.7 million. February imports of flax, hemp and ramie manufactures were valued at \$3.2 million against \$2.8 million a year earlier and \$3.5 million in January. Imports of wool manufactures were valued at \$7.9 million in February, \$5.9 million a year earlier and \$8.2 million a month earlier. February imports of silk manufactures were valued at \$3.7 million compared with \$2.7 million in February 1955 and \$4 million in January 1956.

### Tire Cord Fabrics—First Quarter 1956

Production of tire cord and tire fabric decreased one per cent during the first quarter of 1956 compared to the previous quarter. Total production of 128,763 thousand pounds was one per cent above the first quarter 1955 level, according to the Bureau of the Census, U. S. Department of Commerce. The output of rayon tire cord and tire cord fabric was 98,481 thousand pounds, or a three per cent decline below the previous quarter's level. During the same periods, the production of nylon tire cord and tire cord fabric increased four per cent while the output of cotton tire cord and tire cord fabric (excluding chafer fabrics) increased six per cent. Stocks of tire cord and tire cord fabrics on March 31, 1956, was 59,071 thousand pounds, or six per cent above the December 31, 1955, level.

### Big Yardage Gains Possible In Men's Suits

The possibility of a healthy fillip to the sale of men's suitings is seen by an official of one of the oldest and largest factoring companies. Frank C. Howell, vice-president of Commercial Factors Corp., said that successful promotion by the trade of the double-breasted suit would mean an important increase in demand for men's fabrics. "If the revised double-breasted suit with the narrow lapel and slimmer lines can stage a sufficient comeback so that it accounts for even 1/20 of all men's suits sold," he said, "it would mean sale of 130,000 more yards of goods."

Mr. Howell reported that men's suit cuttings are running at the rate of about 21,000,000 per year. One-twentieth of that would be 1,050,000 suits. Since the double-breasted suit needs about an eight of a yard more material, production of 1,050,000 suits would require about 130,000 additional yards of goods. "Those eights-of-a-yard really add up, just as the minute savings in yardage created by trouser cuff elimination did in World War II. Consumer acceptance of double-breasteds could also result in another big plus for the trade. If the double-breasted suit, because of new style, becomes accepted, it might mean not merely the purchase of a double-breasted to replace a single, but the addition of an extra suit to the male wardrobe. In other words, brand new style demand, rather than merely replacement demand, would be a factor," he pointed out.

### Wool Consumption And Stocks-March 1956

The March rate of fiber consumption on the woolen and worsted systems was 11 per cent below the February rate and six per cent above that of March 1955, according to the Bureau of the Census, U. S. Department of Commerce. The weekly average raw wool consumption during March was 8,750 thousand pounds (scoured basis), or ten per cent below the February level, and ten per cent above that of March 1955. The rate of consumption of carpet class wool decreased 14 per cent compared to the previous month and increased 13 per cent compared to March 1955, while consumption of apparel class wool was eight per cent below the February level and nine per cent above that of March of last year. Consumption of fibers other than raw wool averaged 5,366 thousand pounds per week, or 12 per cent below the February average, and approximately the same as March of last year. No allowance has been made for usual seasonal

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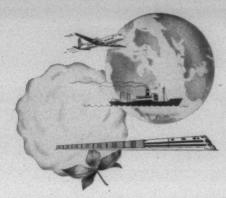
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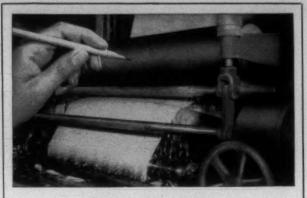
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changes in compiling these monthly totals and per cent changes from previous months.

The long-anticipated reversal of a five-year trend towards fabrics of woolen construction may be materializing. The Wool Bureau reports. The bureau based its conclusion on census statistics of raw wool and total fiber consumption in the wool textile industry during January and February. A gain of 21 per cent over January-February 1955 in raw wool use on the worsted system is between two and three times the corresponding gain of eight per cent on the woolen system, the bureau said. The gain in total apparel wool use was 15 per cent—more than double the annual rate of gain (seven per cent) recorded in 1955 over 1954, the bureau added.

The foregoing pattern of consumption presages an increase in the production of 100 per cent wool and highwool-content fabrics, the bureau asserted. It noted that fabrics of woolen construction have traditionally lent themselves more readily to blending than worsteds and cited statistics of total fiber consumption in each system. In 1955, the Bureau said, raw wool accounted for 41 per cent of all fibers consumed in the woolen system of spinning—the remainder being other wool, reprocessed and reused wool, man-made fibers, specialty fibers, cotton and silk. In contrast, the bureau said, raw wool in the worsted system of spinning accounted for 88 per cent of total fiber consumption. These proportions were unchanged during the first two months of 1956.

Thus, the bureau concluded, the bigger gains in consumption of wool in the worsted system will result in a relatively larger volume of high-content wool fabrics during 1956 than last year. In a review of 1955 apparel fabric production, the bureau had pointed out that the year had witnessed a culmination of the five-year trend in favor of woolen constructions. In women's wear fabrics, they accounted for 90 per cent of total wool fabric production for this market compared with only 71 per cent in 1950. In men's wear fabrics, woolens represented 54 per cent of 1955 production for this market compared with only 32 per cent in 1950.

### Sheffield Gage Proposed As World Standard

At a council meeting of the International Standards Organization held at Southport, England, May 15-18, a Micronaire gage manufactured by The Sheffield Corp. was proposed by the American delegation as the world's standard instrument for measuring fineness of textile fibers.

The need for a single standard of grading the fineness of textile fibers grown in any part of the world is necessary if trade disagreements and expensive arbitration are to be avoided among importing and exporting countries, the Sheffield Corp. points out. The Micronaire provides this standard. It has been used all over the world by domestic and foreign textile producers and manufacturers of cotton and wool products since 1948, and now requires only international agreement of the I.S.O. on standard methodology.

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Manufacturer of tapes, belting and strappings is expanding its sales organization and has need for two full time salesmen, one working out of the Charlotte Area and the other out of the Atlanta Area. Salary, bonus and expenses. Age, education and experience secondary to native intelligence and ability. Replies held confidential.

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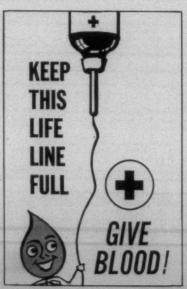
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